

**APPENDIX 13**  
**PHOTOGRAPHIC DOCUMENTATION**

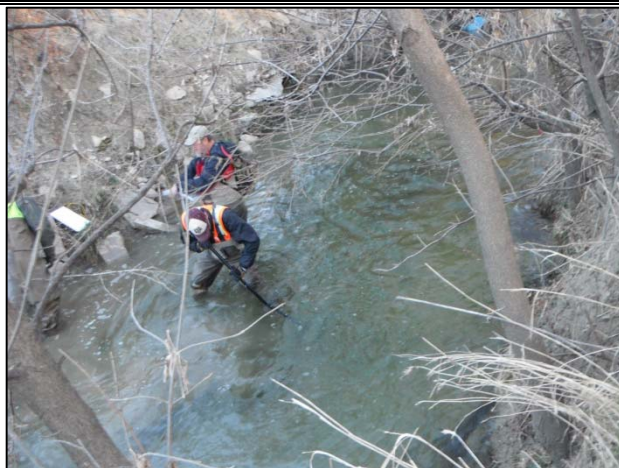


**APPENDIX 13.1**  
**2014 PHOTOGRAPHIC DOCUMENTATION**



May 2014

Affected Property Assessment Report

**Project Title: Exide-Stewart Creek Survey****LOCATION 1:**

Picture #3206

Map Location: T4G1

Description: Creek bed composed of soft sediment with fine gravel, water depth approx. 1.5-2 ft. deep, slow/medium flow, sediment continues for approx. 25-30 y.

**LOCATION 2:**

Picture #3210

Map Location: Battery Chip1

Description: Creek bed composed of mostly gravel but contains sediment (~½" deep) in left side of creek bed

**LOCATION 3:**

Picture #3217

Map Location: G2

Description: Creek bed is composed of a mix of sediment and gravel; is downstream of WWTP and a bend in the creek; water depth is approx. 3ft; creek width is approx. 12ft.

**LOCATION 4:**

Picture #3220

Map Location: Outfall

Description: Creek bed is composed of soft sediment; located at outfall from WWTP (2 outfalls); water depth is approx. 3ft; creek width is approx. 10ft; bend in creek approx. 30 y. upstream from this location.



May 2014

Affected Property Assessment Report

**LOCATION 5:**

Picture #3228

Map Location: G3

Description: Creek bed is composed mostly sediment; located at a bend in the creek; water depth is approx.  $\frac{1}{2}$  - 2 ft.

**LOCATION 6:**

Picture #3234

Map Location: W32

Description: Creek bed is composed mostly sediment with gravel; water depth is approx. 2-3 ft; creek width is approx. 10 ft; small sediment area

**LOCATION 7:**

Picture #3238

Map Location: G4

Description: Creek bed is composed of very soft sediment; low flow area; water depth is approx.  $\frac{1}{2}$  - 1  $\frac{1}{2}$  ft.; creek width is approx. 8 ft.

**LOCATION 8:**

Picture #3242

Map Location: G5

Description: Creek bed is composed of soft sediment; area is directly upstream of beaver dam; water depth is approx. 2-3 ft; creek width is approx. 10-15 ft.; slow flow



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Affected Property Assessment Report

**LOCATION 9:**

Picture #3247

Map Location: G6

Description: Creek bed composed of soft sediment; water depth is approx. 4 ft; creek width is approx. 7 ft; slow flow; Approx. 10 y. to a bend in the creek where there continues to be soft sediment

**LOCATION 12:**

Picture #3248

Map Location: T6G8

Description: Creek bed composed of very soft silt with some gravel; water depth approx. 2 ft; creek width is approx. 12 ft; slow flow.

**SAMPLE LOCATIONS WITH NO PICTURES:****LOCATION 10:**

Map Location: 66

Description: Creek bed is composed of soft sediment; low flow; water depth is approx. 1-2 ft; located at a bend in the creek.

**LOCATION 11:**

Map Location: T5G7

Description: Creek bed is composed of soft sediment; water depth approx. 3 ft; creek width is approx. 7 ft; low flow; soft sediment with some gravel continues past this location.

**LOCATION 13:**

Map Location: G10

Description: Soft sediment

**LOCATION 14:**

Map Location: G11

Description: Soft Sediment

**LOCATION 14:**

Map Location: G12

Description: Soft Sediment



May 2014

Affected Property Assessment Report

**Project Title: Exide-Stewart Creek Survey****Parcels: R621602, R43710, R253754, R43703, R2592405****LOCATION 1:**

Picture #3258

Map Location: 67

Description: Creek bed composed of sediment and gravel. Water depth is approx. 1ft; creek width approx. 12 ft; Battery chips found in area.

**LOCATION 2:**

Picture #3267

Map Location: G14

Description: Creek bed composed of half gravel and half sediment; low flow; water depth is approx. 1-2 ft.; Creek width is approx. 15 ft.

**LOCATION 3:**

Picture #3275

Map Location: ~10 y. upstream of T9

Description: Creek bed composed of soft sediment in right side of creek bed; very steep banks; water depth approx. 2 ft; low flow.

**LOCATION 4:**

Picture #3277

Map Location: G16

Description: Creek bed composed of sediment and gravel; water depth approx. 2-3 ft; creek width approx. 10-15 ft; low flow.



May 2014

## Affected Property Assessment Report

**LOCATION 5:**

Picture #3283

Map Location: G18

Description: Creek bed composed of sediment; water depth approx. 1-2 ft.; creek width approx. 10 ft.; Slow to medium flow in creek.

**LOCATION 6:**

Picture #3289

Map Location: G19

Description: Creek bed composed of sediment and gravel; slow flow in this area of the creek; water depth is approx. 2-3 ft.; creek width is approx. 12 ft.

**LOCATION 7:**

Picture #3293

Map Location: G20

Description: Creek bed composed of soft sediment; water depth is approx. 2-3 ft.; creek width is approx. 13 ft.; slow flow in this area of the creek; located just downstream of bend in the creek.



May 2014

Affected Property Assessment Report

**Project Title: Exide-Stewart Creek Survey**

Parcels: R2092964, R2593946 (non-city); R957575, R2665830, R2665830, R2674785, R2582733 (city)

**LOCATION 1:**

Picture #3298

Map Location: G21

Description: Creek bed is composed of sediment on the sides of the creek bed but gravel in the deepest part of the creek bed; located just upstream of the bend in the creek; water depth is approx. 1-3 ft.; creek width is approx. 6-8 ft.

**LOCATION 2:**

Picture #3301

Map Location: approx. 150 y. upstream of W45

Description: Creek bed composed of sediment and some gravel; low flow area; water depth is approx. 2-3 ft.; creek width is approx. 10-15 ft.

**LOCATION 3:**

Picture #3304

Map Location: G22

Description: Creek bed composed of sediment and detritus; near the outfall for the WWTP; some big concrete slabs in water; water depth approx. 2-3 ft.; creek width is approx. 15 ft.; slow flow area.

**LOCATION 4:**

Picture #3306

Map Location: T11

Description: Creek bed composed of soft sediment; battery chips found in the area; water depth is approx. 1-2 ½ ft.; creek width is approx. 10 ft.; area of slow flow.



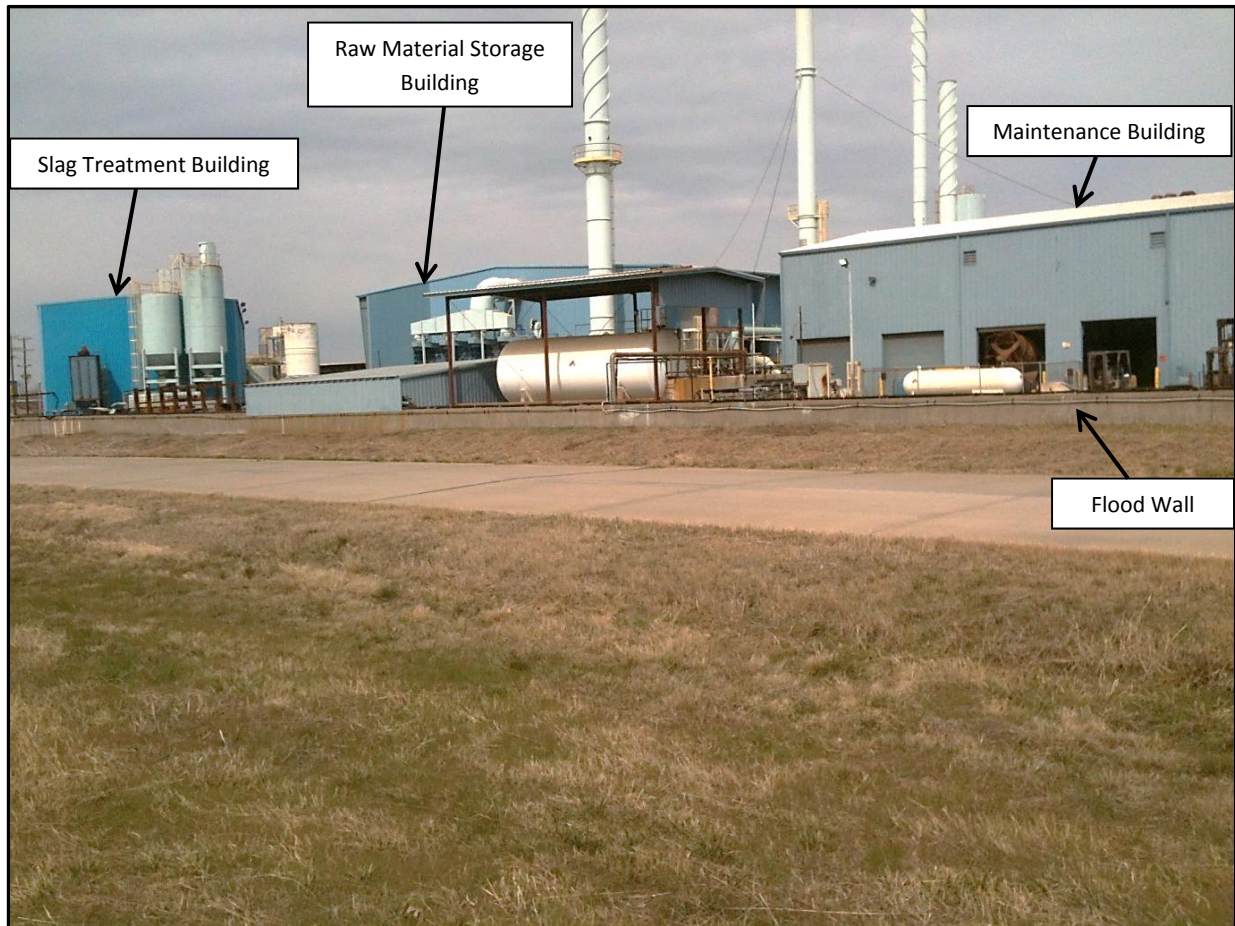
**APPENDIX 13.2**  
**2012/2013 PHOTOGRAPHIC DOCUMENTATION**



### Appendix 13

#### Photographic Documentation

**Photo 1** South side of former production area, prior to demolition (view looking northwest from vicinity of soil sample location ECO-8) (March 2013).





### **Appendix 13**

#### **Photographic Documentation**

**Photo 2** Looking upstream at Stewart Creek from south side of flood wall near Wastewater Treatment Facility (March 2013).

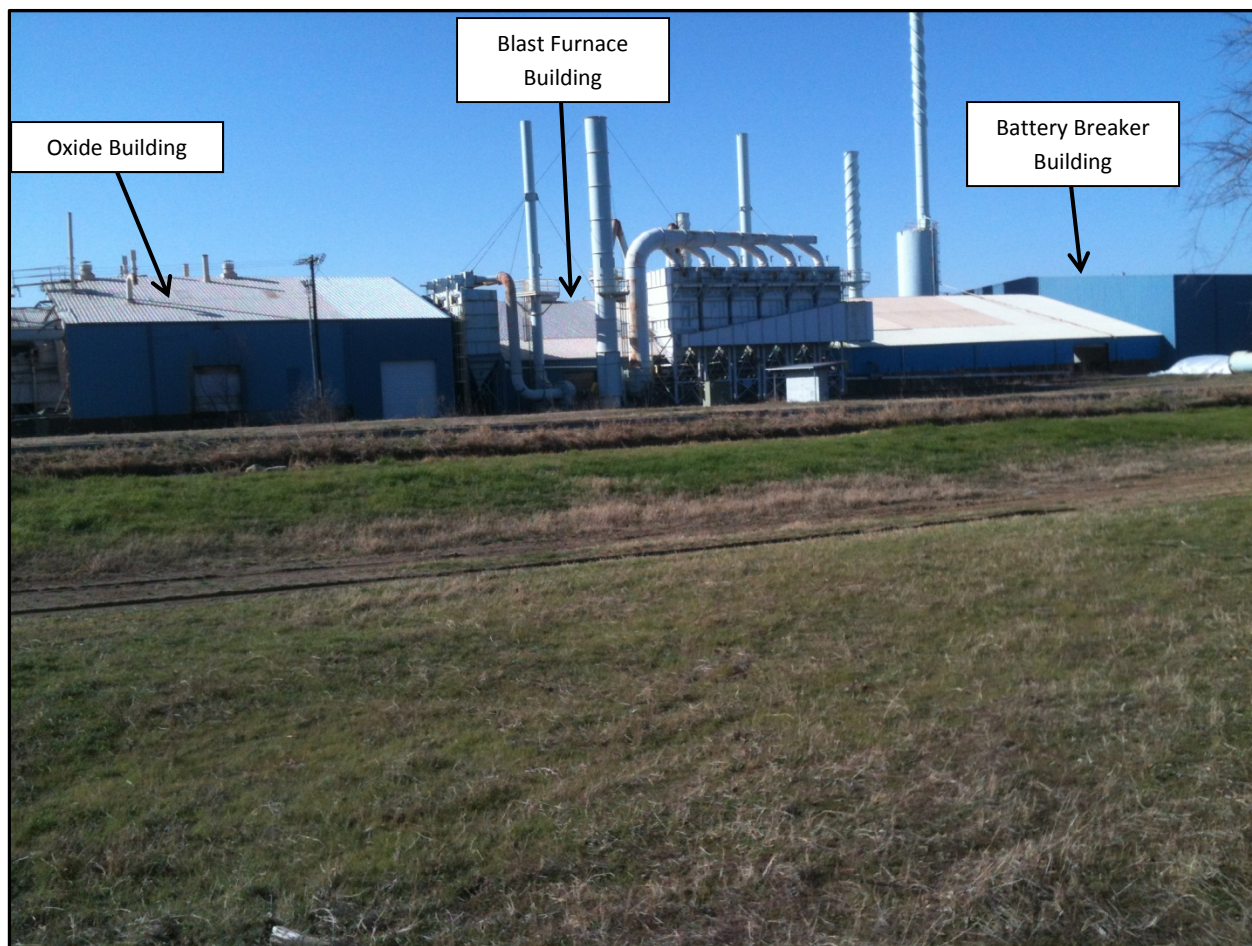




### Appendix 13

#### Photographic Documentation

**Photo 3** North side of former production area, during demolition (view looking south across the North Disposal Area) (March 2013).





**Appendix 13**  
**Photographic Documentation**

**Photo 4** Battery Receiving/Storage Building after roof was removed (view looking west) (April 2013).





**Appendix 13**  
**Photographic Documentation**

**Photo 5** Interior of Slag Treatment Building, prior to demolition (March 2013).





### **Appendix 13**

#### **Photographic Documentation**

**Photo 6** South side of the Slag Treatment Building, prior to demolition (view looking northwest) (March 2013). Monitoring wells MW-26 (background) and MW-29 (foreground) are visible between the flood wall and Stewart Creek.





**Appendix 13**  
**Photographic Documentation**

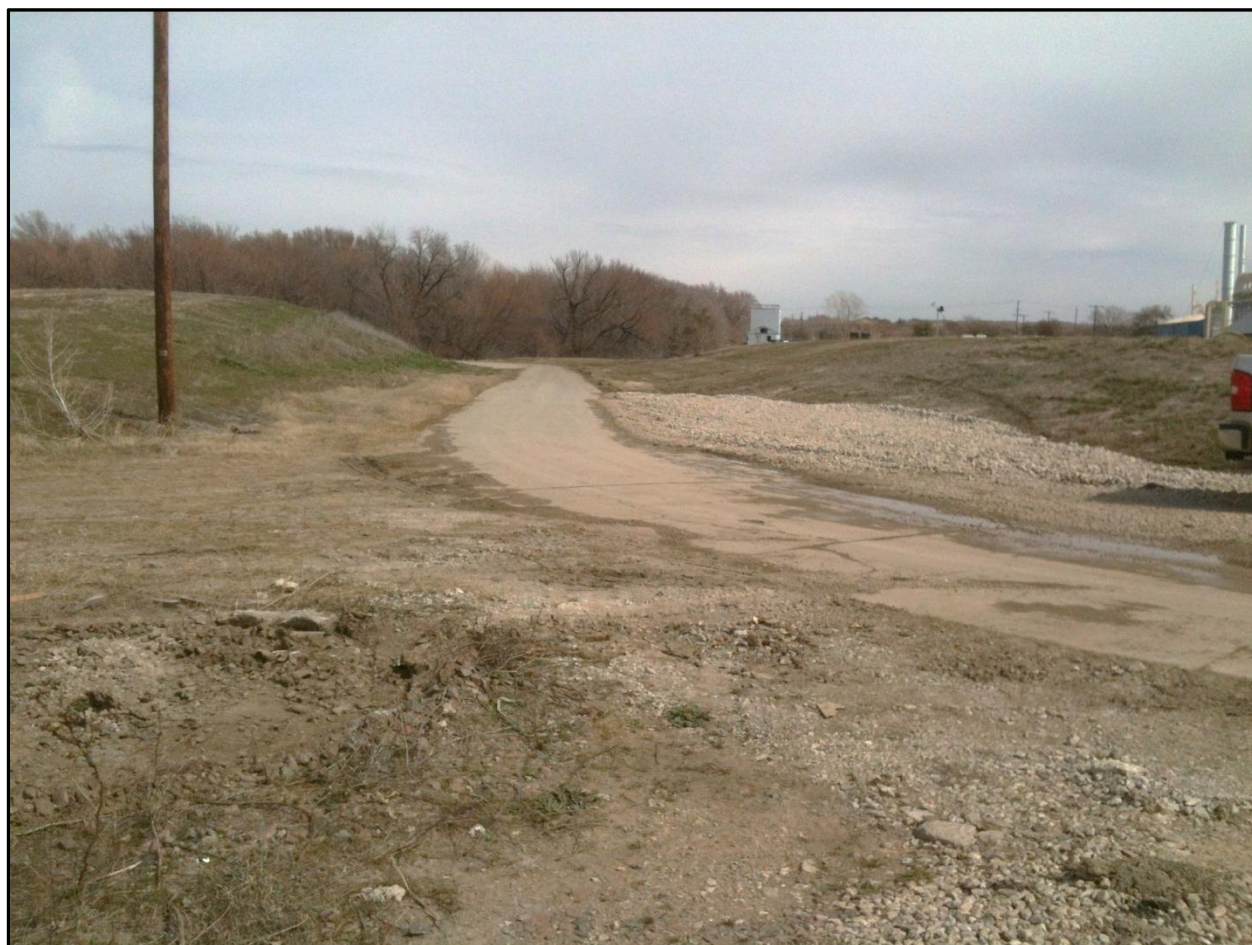
**Photo 7** Interior of Raw Material Storage Building, prior to demolition (May 2013).





**Appendix 13**  
**Photographic Documentation**

**Photo 8** View from Slag Landfill looking eastward (March 2013).





**Appendix 13**  
**Photographic Documentation**

**Photo 9** Former railroad outfall for the North Tributary located south of the Slag Landfill near monitoring well MW-24 (March 2013).





**Appendix 13**  
**Photographic Documentation**

**Photo 10** Current outfall for the North Tributary west of the Slag Landfill (May 2013).





### Appendix 13 Photographic Documentation

**Photo 11** Installation of monitoring well MW-23 on southeast side of Bale Stabilization Area (March 2013).





**Appendix 13**  
**Photographic Documentation**

**Photo 12** Installation of boring 2013-CUFT-6 along drainage ditch west of Crystallization Unit (March 2013).





**Appendix 13**  
**Photographic Documentation**

**Photo 13** Crystallization Unit Frac Tank (March 2013).





**Appendix 13**  
**Photographic Documentation**

**Photo 14** Black plastic chip observed in Shooting Range Berm test pit, prior to removal of the berm (April 2012).





### Appendix 13

#### Photographic Documentation

**Photo 15** Core from soil boring 2012-SL-2 (January 2012). White carbonate granules are visible suspended in a clay matrix, typical of the colluvial soils at the Site.





**Appendix 13**  
**Photographic Documentation**

**Photo 16** Eagle Ford Shale at MW-20 (January 2012).





**Appendix 13**  
**Photographic Documentation**

**Photo 17** Fill material in boring 2012-BY-4 from the Boneyard area of the Slag Landfill. Slag is visible in photo.





**Appendix 13**  
**Photographic Documentation**

**Photo 18** Gabion basket at boring location 2013-FWFS-1A.





**Appendix 13**  
**Photographic Documentation**

**Photo 19** Sediment sampling in Stewart Creek (January 2012).





**APPENDIX 16  
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**APPENDIX 17  
HISTORICAL DATA**



**Table A17-1**  
**Historical Data - Soil**  
**Data Tables and Reference Guide**

Sample Data										References						
Sample ID	Sample Date	Sample Depth (ft)	pH (pH units)	TPH (mg/kg)	Calcium (mg/kg)	Chloride (mg/kg)	Sulfate (mg/kg)	Lead (mg/kg)	Cadmium (mg/kg)	pH	TPH	Calcium	Chloride	Sulfate	Lead	Cadmium
<b>B1</b>																
B1N-SB-001	06/14/90	0-0.5	8.4	---	---	---	---	58	6.2	2.3	---	---	---	---	2.3	2.3
B1N-SB-002	06/14/90	0.5-1	8.6	---	---	---	---	55	4.9	2.3	---	---	---	---	2.3	2.3
B1N-SB-003	06/14/90	1-1.5	8.7	---	---	---	---	58	5.3	2.3	---	---	---	---	2.3	2.3
B1N-SB-004	06/14/90	5	8.5	---	---	---	---	43	4.5	2.3	---	---	---	---	2.3	2.3
B1N-SB-005	06/14/90	10	7.7	---	---	---	---	19	1.4	2.3	---	---	---	---	2.3	2.3
B1N-SB-006	06/21/90	15	9.1	---	---	---	---	10	<0.3	2.3	---	---	---	---	2.3	2.3
B1N-SB-007	06/21/90	20	9	---	---	---	---	14	1.1	2.3	---	---	---	---	2.3	2.3
B1N-SB-008	06/21/90	25	9.3	---	---	---	---	18	<0.3	2.3	---	---	---	---	2.3	2.3
B1N-SB-009	06/21/90	30	9.3	---	---	---	---	16	<0.3	2.3	---	---	---	---	2.3	2.3
B1N-SB-010	06/21/90	35	10	<20	---	---	---	18	<0.3	2.3	2	---	---	---	2.3	2.3
B1N-SB-011	06/21/90	40	9.7	<20	---	---	---	14	<0.3	2.3	2	---	---	---	2.3	2.3
B1N-SB-012	06/22/90	45	9.8	---	---	---	---	12	<0.3	2.3	---	---	---	---	2.3	2.3
B1N-SB-013	06/22/90	50	10	---	---	---	---	10	<0.3	2.3	---	---	---	---	2.3	2.3
B1N-SB-014	06/22/90	55	9.7	---	---	---	---	10	<0.3	2.3	---	---	---	---	2.3	2.3
B1N-SB-015	06/21/90	60	9.6	---	---	---	---	12	<0.3	2.3	---	---	---	---	2.3	2.3
BS1-SB-001B	06/20/90	0-0.5	7.7	---	---	---	---	178	2.9	2.3	---	---	---	---	2.3	2.3
BS-1-001	05/10/90	0-0.5	---	---	---	---	---	124	1.6	---	---	---	---	---	2.3	2.3
<b>B2</b>																
BS-2-001	05/10/90	0-0.5	---	---	---	---	---	156	2	---	---	---	---	---	2.3	2.3
BS2-SB-001B	06/20/90	0-0.5	7.7	---	---	---	---	539	5.4	2.3	---	---	---	---	2.3	2.3
B2N-SB-001	06/14/90	0-0.5	8.2	<20	---	---	---	12,400	7.4	3	3	---	---	---	3	3
B2N-SB-002	06/14/90	0.5-1	8.4	<20	---	---	---	87	3.3	3	3	---	---	---	3	3
B2N-SB-003	06/14/90	1-1.5	8	20	---	---	---	227	2.4	3	3	---	---	---	3	3
B2N-SB-004	06/14/90	5	7.5	<20	---	---	---	14	1.5	3	3	---	---	---	3	3
B2N-SB-005	06/14/90	10	6.6	<20	---	---	---	38	1.9	3	3	---	---	---	3	3
B2N-SB-006	06/14/90	15	6.4	30	---	---	---	26	<0.3	3	3	---	---	---	3	3
B2M-001	07/11/90	0-0.5	8.3	---	---	---	---	180	2.3	2.3	---	---	---	---	2.3	2.3
B2M-002	07/11/90	0.5-1	8.2	---	---	---	---	354	2.8	2.3	---	---	---	---	2.3	2.3
B2M-002	07/11/90	1-1.5	7.7	---	---	---	---	106	2.3	2.3	---	---	---	---	2.3	2.3
B2M-004	07/11/90	5	7.3	---	---	---	---	16	<0.3	2.3	---	---	---	---	2.3	2.3
B2M-005	07/11/90	10	7.4	---	---	---	---	23	<0.3	2.3	---	---	---	---	2.3	2.3
B2M-006	07/11/90	13	5.6	---	---	---	---	45	<0.3	2.3	---	---	---	---	2.3	2.3
B2R-001	07/11/90	0-0.5	8	---	---	---	---	1460	4.2	2.3	---	---	---	---	2.3	2.3
B2R-002	07/11/90	0.5-1	8	---	---	---	---	68	1.8	2.3	---	---	---	---	2.3	2.3
B2R-003	07/11/90	1-1.5	8.1	---	---	---	---	34	2	2.3	---	---	---	---	2.3	2.3
B2R-004	07/11/90	5	8.2	---	---	---	---	41	2.1	2.3	---	---	---	---	2.3	2.3
B2R-005	07/11/90	10	7.8	---	---	---	---	32	1.7	2.3	---	---	---	---	2.3	2.3
B2R-006	07/11/90	15	4.1	---	---	---	---	38	1.2	2.3	---	---	---	---	2.3	2.3



**Table A17-1**  
**Historical Data - Soil**  
**Data Tables and Reference Guide**

Sample Data										References						
Sample ID	Sample Date	Sample Depth (ft)	pH (pH units)	TPH (mg/kg)	Calcium (mg/kg)	Chloride (mg/kg)	Sulfate (mg/kg)	Lead (mg/kg)	Cadmium (mg/kg)	pH	TPH	Calcium	Chloride	Sulfate	Lead	Cadmium
<b>B3</b>																
BS-3-001	05/10/90	0-0.5	---	---	---	---	---	9690	4.8	---	---	---	---	---	2,3	2,3
B3N-SB-001	06/13/90	0.5	7.3	60	---	---	---	48	<0.3	3	3	---	---	---	3	3
BS3-SB-001B	06/20/90	0-0.5	7.5	---	---	---	---	12100	7.6	2,3	---	---	---	---	2,3	2,3
B3N-SB-002	06/13/90	1	7.5	30	---	---	---	37	0.7	3	3	---	---	---	3	3
B3N-SB-003	06/13/90	1.5	7.3	<20	---	---	---	42	<0.3	3	3	---	---	---	3	3
B3N-SB-004	06/13/90	5	3.6	<20	---	---	---	37	<0.3	3	3	---	---	---	3	3
B3N-SB-005	06/13/90	10	2.8	<20	---	---	---	37	<0.3	3	3	---	---	---	3	3
B3N-SB-006	06/13/90	15	7.6	---	---	---	---	19	<0.3	3	---	---	---	---	3	3
B3R-001	07/11/90	0.5	7.5	---	---	---	---	175	2.3	2,3	---	---	---	---	2,3	2,3
B3R-002	07/11/90	1	7.8	---	---	---	---	41	<0.3	2,3	---	---	---	---	2,3	2,3
B3R-003	07/11/90	1.5	8	---	---	---	---	25	<0.3	2,3	---	---	---	---	2,3	2,3
B3R-004	07/11/90	5	7.6	---	---	---	---	32	<0.3	2,3	---	---	---	---	2,3	2,3
B3R-005	07/11/90	10	3.7	---	---	---	---	20	<0.3	2,3	---	---	---	---	2,3	2,3
<b>B4</b>																
BS-4-001	05/10/90	0-0.5	---	---	---	---	---	345	2.3	---	---	---	---	---	2,3	2,3
B4N-SB-001	06/14/90	0-0.5	8.4	<20	---	---	---	75	1.6	3	3	---	---	---	3	3
B4N-SB-001B	06/20/90	0-0.5	7.9	---	---	---	---	72	2.1	2,3	---	---	---	---	2,3	2,3
BS4-SB-001B	06/20/90	0-0.5	8	---	---	---	---	163	0.9	2,3	---	---	---	---	2,3	2,3
B4N-SB-002	06/14/90	0.5-1	8.2	<20	---	---	---	77	2.2	3	3	---	---	---	3	3
B4N-SB-002B	06/20/90	0.5-1	8.2	---	---	---	---	43	2	2,3	---	---	---	---	2,3	2,3
B4N-SB-003	06/14/90	1-1.5	8.2	<20	---	---	---	41	1.6	3	3	---	---	---	3	3
B4N-SB-003B	06/20/90	1-1.5	8.3	---	---	---	---	38	1.7	2,3	---	---	---	---	2,3	2,3
B4N-SB-004	06/14/90	5	4.2	<20	---	---	---	24	<0.3	3	3	---	---	---	3	3
<b>B4</b>																
B4N-SB-004B	06/20/90	5	4	---	---	---	---	27	<0.3	2,3	---	---	---	---	2,3	2,3
B4N-SB-005	06/20/90	10	6.8	---	---	---	---	22	<0.3	2,3	---	---	---	---	2,3	2,3
B4R-001	07/11/90	0-0.5	8.3	---	---	---	---	71	2.9	2,3	---	---	---	---	2,3	2,3
B4R-002	07/11/90	0.5-1	8.3	---	---	---	---	29	2	2,3	---	---	---	---	2,3	2,3
B4R-003	07/11/90	1-1.5	8.3	---	---	---	---	34	1.6	2,3	---	---	---	---	2,3	2,3
B4R-004	07/11/90	5	4.7	---	---	---	---	16	<0.3	2,3	---	---	---	---	2,3	2,3
<b>B5</b>																
BS-5-001	05/10/90	0-0.5	---	---	---	---	---	819	2	---	---	---	---	---	2,3	2,3
B5N-SB-001	06/07/90	0-0.5	8	---	---	---	---	117	3	2,3	---	---	---	---	2,3	2,3
BS5-SB-001B	06/20/90	0-0.5	8	---	---	---	---	936	3.8	2,3	---	---	---	---	2,3	2,3
B5N-SB-002	06/07/90	0.5-1	7.9	---	---	---	---	56	3.5	2,3	---	---	---	---	2,3	2,3
B5N-SB-003	06/07/90	1-1.5	8.1	---	---	---	---	51	2.4	2,3	---	---	---	---	2,3	2,3
B5N-SB-004	06/07/90	5	7.8	---	---	---	---	30	3.5	2,3	---	---	---	---	2,3	2,3
B5N-SB-005	06/07/90	10	7.8	---	---	---	---	46	4.3	2,3	---	---	---	---	2,3	2,3
B5N-SB-006	06/07/90	15	8.1	---	---	---	---	25	<0.3	2,3	---	---	---	---	2,3	2,3



**Table A17-1**  
**Historical Data - Soil**  
**Data Tables and Reference Guide**

Sample Data										References						
Sample ID	Sample Date	Sample Depth (ft)	pH (pH units)	TPH (mg/kg)	Calcium (mg/kg)	Chloride (mg/kg)	Sulfate (mg/kg)	Lead (mg/kg)	Cadmium (mg/kg)	pH	TPH	Calcium	Chloride	Sulfate	Lead	Cadmium
<b>B6</b>																
BS-6-001	05/07/90	0-0.5	---	---	---	---	---	63	3.6	---	---	---	---	---	2.3	2.3
BS-6-001	06/04/90	0-0.5	---	<20	---	---	---	---	---	---	2.3	---	---	---	---	---
BS-6-001	06/04/90	0.5-1	---	<20	---	---	---	---	---	---	3	---	---	---	---	---
BS-6-002	05/07/90	0.5-1	---	---	---	---	---	43	3.4	---	---	---	---	---	2.3	2.3
BS-6-002	---	0.5-1	---	<20	---	---	---	---	---	---	2	---	---	---	---	---
BS-6-003	05/07/90	1-1.5	---	---	---	---	---	50	3.4	---	---	---	---	---	2.3	2.3
BS-6-003A (DUP)	05/07/90	1-1.5	---	---	---	---	---	41	3.1	---	---	---	---	---	2.3	2.3
BS-6-004	05/07/90	1.5-2	---	---	---	---	---	52	3	---	---	---	---	---	2.3	2.3
<b>B7</b>																
B7N-SB-001	05/10/90	0-0.5	8.1	---	---	---	---	201	2.7	2.3	---	---	---	---	2.3	2.3
B7N-SB-001B	06/20/90	0-0.5	7.7	---	---	---	---	374	5.5	2.3	---	---	---	---	2.3	2.3
B7N-SB-002	05/10/90	0.5-1	8	---	---	---	---	115	2.3	2.3	---	---	---	---	2.3	2.3
B7N-SB-002B	06/20/90	0.5-1	8.2	---	---	---	---	54	3.1	2.3	---	---	---	---	2.3	2.3
B7N-SB-003	05/10/90	1-1.5	7.9	---	---	---	---	102	2.5	2.3	---	---	---	---	2.3	2.3
B7N-SB-003B	06/20/90	1-1.5	8.1	---	---	---	---	49	3.9	2.3	---	---	---	---	2.3	2.3
B7N-SB-004	05/10/90	5	8.6	---	---	---	---	46	3.7	2.3	---	---	---	---	2.3	2.3
B7N-SB-005	05/10/90	10	8.8	---	---	---	---	44	4.2	2.3	---	---	---	---	2.3	2.3
B7N-SB-006	05/10/90	15	5.1	---	---	---	---	28	<0.3	2.3	---	---	---	---	2.3	2.3
B7N-SB-007	05/10/90	20	7.3	---	---	---	---	17	<0.3	2.3	---	---	---	---	2.3	2.3
B7N-SB-008	05/10/90	25	8.2	---	---	---	---	17	<0.3	2.3	---	---	---	---	2.3	2.3
<b>B8</b>																
B8N-SB-001	05/15/90	0-0.5	8.2	---	---	---	---	45	2.2	2.3	---	---	---	---	2.3	2.3
B8N-SB-002	05/15/90	0.5-1	8.4	---	---	---	---	83	2.4	2.3	---	---	---	---	2.3	2.3
B8N-SB-003	05/15/90	1-1.5	7.9	---	---	---	---	81	2.2	2.3	---	---	---	---	2.3	2.3
B8N-SB-004	05/15/90	5	7.6	---	---	---	---	34	2.6	2.3	---	---	---	---	2.3	2.3
B8N-SB-005	05/15/90	10	7.5	---	---	---	---	26	0.6	2.3	---	---	---	---	2.3	2.3
B8N-SB-006	05/15/90	15	7	---	---	---	---	17	<0.3	2.3	---	---	---	---	2.3	2.3
B8N-SB-007	05/15/90	20	7.7	---	---	---	---	19	<0.3	2.3	---	---	---	---	2.3	2.3
<b>B9</b>																
B9N-SB-001	06/12/90	0-0.5	8.4	---	---	---	---	58	1.4	2.3	---	---	---	---	2.3	2.3
B9N-SB-002	06/12/90	0.5-1	8.2	---	---	---	---	42	1.2	2.3	---	---	---	---	2.3	2.3
B9N-SB-003	06/12/90	1-1.5	8.4	---	---	---	---	39	1.6	2.3	---	---	---	---	2.3	2.3
B9N-SB-004	06/12/90	5	8.5	---	---	---	---	36	4.3	2.3	---	---	---	---	2.3	2.3
B9N-SB-005	06/12/90	10	8.3	---	---	---	---	19	<0.3	3	---	---	---	---	2.3	2.3
B9N-SB-006	06/12/90	15	6.6	---	---	---	---	19	<0.3	2.3	---	---	---	---	2.3	2.3
<b>MW 10</b>																
MW10-SB-001	06/13/90	0-0.5	8.3	---	---	---	---	42	1.3	2.3	---	---	---	---	2.3	2.3
MW10-SB-001	05/07/90	0-0.5	---	---	---	---	---	1020	2.5	---	---	---	---	---	2.3	2.3
MW10-SB-001B	06/20/90	0-0.5	7.1	---	---	---	---	3250	3.9	2.3	---	---	---	---	2.3	2.3
MW10-SB-002	05/07/90	0.5-1	8.1	---	---	---	---	194	2.1	2.3	---	---	---	---	2.3	2.3
MW10-SB-002	06/13/90	0.5-1	8.1	---	---	---	---	30	0.9	3	---	---	---	---	2.3	2.3



**Table A17-1**  
**Historical Data - Soil**  
**Data Tables and Reference Guide**

Sample Data										References						
Sample ID	Sample Date	Sample Depth (ft)	pH (pH units)	TPH (mg/kg)	Calcium (mg/kg)	Chloride (mg/kg)	Sulfate (mg/kg)	Lead (mg/kg)	Cadmium (mg/kg)	pH	TPH	Calcium	Chloride	Sulfate	Lead	Cadmium
<b>MW 10</b>																
MW10-SB-002B	06/20/90	0.5-1	7.5	---	---	---	---	584	2.9	2,3	---	---	---	---	2,3	2,3
MW10-SB-003	06/13/90	1-1.5	8.2	---	---	---	---	33	2.7	2,3	---	---	---	---	2,3	2,3
MW10-SB-003	05/07/90	1-1.5	---	---	---	---	---	60	3.1	---	---	---	---	---	3	3
MW10-SB-003A	05/07/90	1.5-2	---	---	---	---	---	41	2.6	---	---	---	---	---	2,3	2,3
MW10-SB-003A	06/13/90	1.5-2	8.3	---	---	---	---	33	3.6	3	---	---	---	---	2,3	2,3
MW10-SB-004	06/13/90	5	8.2	---	---	---	---	29	3.9	2,3	---	---	---	---	2,3	3
MW10-SB-005	06/13/90	10	6.9	---	---	---	---	11	<0.3	3	---	---	---	---	2,3	3
MW10-SB-006	06/13/90	15	4.5	---	---	---	---	23	<0.3	2,3	---	---	---	---	2,3	2,3
<b>MW 11</b>																
MW11-SB-001	06/11/90	0.5-1	7.3	---	---	---	---	44	1	2,3	---	---	---	---	2,3	2,3
MW11-SB-002	06/11/90	1.5	7.1	---	---	---	---	37	1.6	2	---	---	---	---	2,3	2,3
MW11-SB-003	06/11/90	1-1.5	7.3	---	---	---	---	66	2.5	2	---	---	---	---	2,3	2,3
MW11-SB-004	06/11/90	5	7.5	---	---	---	---	44	<0.3	2	---	---	---	---	2,3	2,3
MW11-SB-005	06/11/90	10	7.2	---	---	---	---	33	3.8	2,3	---	---	---	---	2,3	2,3
MW11-SB-006	---	15	7.6	---	---	---	---	37	2.9	2	---	---	---	---	2	2
MW11-SB-006	06/11/90	15	5.3	---	---	---	---	12	<0.3	3	---	---	---	---	3	3
<b>MW 12</b>																
MW12-SB-001	06/19/90	0-0.5	7.9	---	---	---	---	38	<0.3	2,3	---	---	---	---	2,3	2,3
MW12-SB-002	06/19/90	0.5-1	7.5	---	---	---	---	50	1.3	2,3	---	---	---	---	2,3	2,3
MW12-SB-003	06/19/90	1-1.5	7.7	---	---	---	---	36	<0.3	2,3	---	---	---	---	2,3	2,3
MW12-SB-004	06/19/90	5	7.5	---	---	---	---	26	2.1	2,3	---	---	---	---	2,3	2,3
MW12-SB-005	06/19/90	10	7.4	---	---	---	---	38	3.3	3	---	---	---	---	2,3	2,3
MW12-SB-006	06/19/90	15	3.9	<20	---	---	---	29	<0.3	2,3	2,3	---	---	---	2,3	2,3
<b>MW-13</b>																
MW13-SB-001	06/18/90	0-0.5	6.6	---	---	---	---	77	2.9	2,3	---	---	---	---	2,3	2,3
MW13-SB-002	06/18/90	0.5-1	7	---	---	---	---	29	<0.3	2,3	---	---	---	---	2,3	2,3
MW13-SB-003	06/18/90	1-1.5	6.5	---	---	---	---	21	<0.3	2,3	---	---	---	---	2,3	2,3
MW13-SB-004	06/18/90	5	7.4	---	---	---	---	41	2.6	2,3	---	---	---	---	2,3	2,3
MW13-SB-005	06/18/90	10	7.1	---	---	---	---	38	2	3	---	---	---	---	2,3	2,3
MW13-SB-006	06/18/90	15	7.5	<20	---	---	---	43	2.8	2,3	2,3	---	---	---	2,3	2,3
MW13-SB-007	06/18/90	20	7.7	---	---	---	---	50	4.5	2,3	---	---	---	---	2,3	2,3
<b>MW-14</b>																
MW14-SB-001	06/18/90	0-0.5	8	---	---	---	---	38	3.2	2,3	---	---	---	---	2,3	2,3
MW14-SB-002	06/18/90	0.5-1	7.9	---	---	---	---	41	3.3	2,3	---	---	---	---	2,3	2,3
MW14-SB-003	06/18/90	1-1.5	8.1	---	---	---	---	31	2.9	2,3	---	---	---	---	2,3	2,3
MW14-SB-004	06/18/90	5	7.9	---	---	---	---	33	4.3	2,3	---	---	---	---	2,3	2,3
MW14-SB-005	06/18/90	10	7.5	---	---	---	---	26	2.8	2,3	---	---	---	---	2,3	2,3
MW14-SB-006	06/18/90	15	4.1	<20	---	---	---	14	<0.3	2,3	2,3	---	---	---	2,3	2,3



**Table A17-1**  
**Historical Data - Soil**  
**Data Tables and Reference Guide**

Sample Data										References						
Sample ID	Sample Date	Sample Depth (ft)	pH (pH units)	TPH (mg/kg)	Calcium (mg/kg)	Chloride (mg/kg)	Sulfate (mg/kg)	Lead (mg/kg)	Cadmium (mg/kg)	pH	TPH	Calcium	Chloride	Sulfate	Lead	Cadmium
<b>MW-15</b>																
MW15-SB-001	06/11/90	0-0.5	8	---	---	---	---	148	3.3	2.3	---	---	---	---	2.3	2.3
MW15-SB-002	06/11/90	0.5-1	8.1	---	---	---	---	42	2.4	2.3	---	---	---	---	2.3	2.3
MW15-SB-003	06/11/90	1-1.5	7.9	---	---	---	---	38	1.8	2.3	---	---	---	---	2.3	2.3
MW15-SB-004	06/11/90	5	7.8	---	---	---	---	37	3	2.3	---	---	---	---	2.3	2.3
MW15-SB-005	06/11/90	10	7.3	---	---	---	---	29	3.1	2.3	---	---	---	---	2.3	2.3
MW15-SB-006	06/11/90	15	8.1	---	---	---	---	23	1.1	2.3	---	---	---	---	2.3	2.3
MW15-SB-007	06/11/90	20	7.8	---	---	---	---	38	3.1	2.3	---	---	---	---	2.3	2.3
<b>MW-16</b>																
MW16-SB-001	05/17/90	0-0.5	7.6	---	---	---	---	103	2.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-002	05/17/90	0.5-1	7.9	---	---	---	---	65	2.2	2.3	---	---	---	---	2.3	2.3
MW16-SB-003	05/17/90	1-1.5	7.6	---	---	---	---	37	2.4	2.3	---	---	---	---	2.3	2.3
MW16-SB-004	05/15/90	5	7.9	---	---	---	---	21	1.8	2.3	---	---	---	---	2.3	2.3
MW16-SB-005	05/15/90	10	8	---	---	---	---	30	2	2.3	---	---	---	---	2.3	2.3
MW16-SB-006	05/15/90	15	8	---	---	---	---	21	1.8	2.3	---	---	---	---	2.3	2.3
MW16-SB-007	05/15/90	20	4.8	---	---	---	---	13	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-008	05/17/90	25	7.5	---	---	---	---	<5.00	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-009	05/17/90	30	7.1	---	---	---	---	<5.00	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-010	05/17/90	35	9.2	---	---	---	---	11	0.9	2.3	---	---	---	---	2.3	2.3
MW16-SB-011	05/17/90	40	9.4	---	---	---	---	17	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-012	05/17/90	45	9.4	---	---	---	---	21	0.6	2.3	---	---	---	---	2.3	2.3
MW16-SB-013	05/17/90	50	10.2	---	---	---	---	15	0.8	2.3	---	---	---	---	2.3	2.3
MW16-SB-014	05/17/90	55	10.1	---	---	---	---	15	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-015	05/17/90	60	9.9	---	---	---	---	17	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-016	05/17/90	65	10	---	---	---	---	17	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-017	05/18/90	70	9.8	---	---	---	---	17	1.5	2.3	---	---	---	---	2.3	2.3
MW16-SB-018	05/18/90	75	9.9	---	---	---	---	23	1.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-019	05/18/90	80	10	---	---	---	---	26	1.7	2.3	---	---	---	---	2.3	2.3
<b>MW-16</b>																
MW16-SB-020	05/18/90	85	10.2	---	---	---	---	23	1	2.3	---	---	---	---	2.3	2.3
MW16-SB-021	05/18/90	90	10.1	---	---	---	---	26	1.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-022	05/18/90	95	10.1	---	---	---	---	21	0.9	2.3	---	---	---	---	2.3	2.3
MW16-SB-023	05/18/90	100	10	---	---	---	---	26	2.6	2.3	---	---	---	---	2.3	2.3
MW16-SB-024	05/18/90	105	9.6	---	---	---	---	21	1.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-025	05/18/90	110	10	---	---	---	---	34	2.9	2.3	---	---	---	---	2.3	2.3
MW16-SB-026	05/18/90	115	10.1	---	---	---	---	17	1	2.3	---	---	---	---	2.3	2.3
MW16-SB-027	05/18/90	120	10.2	---	---	---	---	21	1.9	2.3	---	---	---	---	2.3	2.3
MW16-SB-028	05/18/90	125	10.2	---	---	---	---	6	2	2.3	---	---	---	---	2.3	2.3
MW16-SB-029	05/18/90	130	9.8	---	---	---	---	21	1.7	2.3	---	---	---	---	2.3	2.3
MW16-SB-030	05/18/90	135	9.8	---	---	---	---	23	1.7	2.3	---	---	---	---	2.3	2.3
MW16-SB-031	05/19/90	140	10.1	---	---	---	---	19	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-032	05/19/90	145	10.2	---	---	---	---	17	<0.3	2.3	---	---	---	---	2.3	2.3



**Table A17-1**  
**Historical Data - Soil**  
**Data Tables and Reference Guide**

Sample Data										References						
Sample ID	Sample Date	Sample Depth (ft)	pH (pH units)	TPH (mg/kg)	Calcium (mg/kg)	Chloride (mg/kg)	Sulfate (mg/kg)	Lead (mg/kg)	Cadmium (mg/kg)	pH	TPH	Calcium	Chloride	Sulfate	Lead	Cadmium
<b>MW-16</b>																
MW16-SB-033	05/19/90	150	9.8	---	---	---	---	17	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-034	05/19/90	NS	NS	---	---	---	---	NS	NS	3	---	---	---	---	3	3
MW16-SB-035	05/19/90	160	9.6	---	---	---	---	17	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-036	05/19/90	165	10	---	---	---	---	17	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-037	05/19/90	170	10.2	---	---	---	---	15	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-038	05/19/90	175	10.1	---	---	---	---	13	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-039	05/21/90	180	10	---	---	---	---	13	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-040	05/21/90	185	10	---	---	---	---	19	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-041	05/22/90	190	10.2	---	---	---	---	26	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-042	05/22/90	195	10	---	---	---	---	19	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-043	05/22/90	200	9.6	---	---	---	---	17	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-044	05/22/90	205	10.1	---	---	---	---	15	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-045	05/22/90	210	10	---	---	---	---	22	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-046	05/22/90	215	10	---	---	---	---	32	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-047	05/22/90	220	9.7	---	---	---	---	28	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-048	05/22/90	225	10.2	---	---	---	---	25	1.4	2.3	---	---	---	---	2.3	2.3
MW16-SB-049	05/22/90	230	9.9	---	---	---	---	28	1.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-050	05/22/90	235	9.9	---	---	---	---	30	1.5	2.3	---	---	---	---	2.3	2.3
MW16-SB-051	05/23/90	240	10	---	---	---	---	32	1.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-052	05/23/90	245	9.8	---	---	---	---	25	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-053	05/23/90	250	10	---	---	---	---	28	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-054	05/23/90	255	9.8	---	---	---	---	30	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-055	05/23/90	260	10.1	---	---	---	---	25	<0.3	2.3	---	---	---	---	2.3	2.3
MW16-SB-056	05/23/90	265	10.3	---	---	---	---	21	<0.3	2.3	---	---	---	---	2.3	2.3
<b>MW-16S</b>																
MW16S-SB-001	06/06/90	0-0.5	7.9	---	---	---	---	41	2.8	2.3	---	---	---	---	2.3	2.3
MW16S-SB-002	06/06/90	0.5-1	8.4	---	---	---	---	93	3	2.3	---	---	---	---	2.3	2.3
MW16S-SB-003	06/06/90	1-1.5	8.5	---	---	---	---	41	3.3	2.3	---	---	---	---	2.3	2.3
MW16S-SB-004	06/06/90	5	8.4	---	---	---	---	46	2.7	2.3	---	---	---	---	2.3	2.3
MW16S-SB-005	06/06/90	10	7.6	---	---	---	---	41	3	2.3	---	---	---	---	2.3	2.3
MW16S-SB-006	06/06/90	15	8.5	---	---	---	---	37	2.1	2.3	---	---	---	---	2.3	2.3
<b>MW-17</b>																
MW17-SB-001	06/07/90	0-0.5	7.7	---	---	---	---	11500	8.1	2.3	---	---	---	---	2.3	2.3
MW17-SB-002	06/07/90	0.5-1	8.2	---	---	---	---	41	2.4	2.3	---	---	---	---	2.3	2.3
MW17-SB-003	06/07/90	1-1.5	8	---	---	---	---	70	3	2.3	---	---	---	---	2.3	2.3
MW17-SB-004	06/07/90	5	7.8	---	---	---	---	39	3.5	2.3	---	---	---	---	2.3	2.3
MW17-SB-005	06/07/90	10	8	---	---	---	---	37	4	3	---	---	---	---	2.3	2.3
MW17-SB-006	06/07/90	15	3.9	---	---	---	---	28	<0.3	2.3	---	---	---	---	2.3	2.3



**Table A17-1**  
**Historical Data - Soil**  
**Data Tables and Reference Guide**

Sample Data										References						
Sample ID	Sample Date	Sample Depth (ft)	pH (pH units)	TPH (mg/kg)	Calcium (mg/kg)	Chloride (mg/kg)	Sulfate (mg/kg)	Lead (mg/kg)	Cadmium (mg/kg)	pH	TPH	Calcium	Chloride	Sulfate	Lead	Cadmium
<b>MW-18</b>																
MW18-SB-001	06/12/90	0.5	7.4	---	---	---	---	134	1.6	3	---	---	---	---	3	3
MW18-SB-002	06/12/90	1	7.5	---	---	---	---	39	<0.3	3	---	---	---	---	3	3
MW18-SB-003	06/12/90	1.5	7.6	---	---	---	---	37	2.9	3	---	---	---	---	3	3
MW18-SB-004	06/12/90	5	7.9	---	---	---	---	42	1.3	3	---	---	---	---	3	3
MW18-SB-005	06/12/90	10	7.2	---	---	---	---	14	<0.3	3	---	---	---	---	3	3
MW18-SB-006	06/12/90	15	6	---	---	---	---	16	<0.3	3	---	---	---	---	3	3
<b>P1</b>																
P1-SB-001	05/07/90	0-0.5	---	---	---	---	---	95	2.4	---	---	---	---	---	2,3	2,3
P1-SB-001	06/04/90	0-0.5	---	<20	---	---	---	---	---	---	2,3	---	---	---	---	---
<b>P1</b>																
P1-SB-002	05/07/90	0.5-1	---	---	---	---	---	45	1	---	---	---	---	---	2,3	2,3
P1-SB-002	06/04/90	0.5-1	---	<20	---	---	---	---	---	---	2,3	---	---	---	---	---
P1-SB-003	05/07/90	1-1.5	---	---	---	---	---	340	<0.3	---	---	---	---	---	2,3	2,3
P1-SB-003	06/04/90	1-1.5	---	<20	---	---	---	---	---	---	2,3	---	---	---	---	---
P1-SB-004	05/08/90	5	8.1	---	---	---	---	28	2.3	2,3	---	---	---	---	2,3	2,3
P1-SB-005	05/08/90	10	8.5	---	---	---	---	37	3.7	3	---	---	---	---	2,3	2,3
P1-SB-006	05/08/90	15	8.3	---	---	---	---	26	0.9	2,3	---	---	---	---	2,3	2,3
P1-SB-007	05/08/90	20	7.5	---	---	---	---	19	1	2,3	---	---	---	---	2,3	2,3
P1-SB-003B	06/20/90	1-1.5	7.9	---	---	---	---	98	2.6	2,3	---	---	---	---	2,3	2,3
P1-SB-003A	05/07/90	1.5-2	---	---	---	---	---	50	1.1	---	---	---	---	---	2,3	2,3
<b>P2</b>																
P2-SB-001	05/07/90	0-0.5	---	---	---	---	---	122	2.6	---	---	---	---	---	2,3	2,3
P2-SB-001	05/24/90	0-0.5	---	<20	---	---	---	---	---	---	2,3	---	---	---	---	---
P2-SB-001B	06/20/90	0-0.5	7.8	---	---	---	---	137	2.9	2,3	---	---	---	---	2,3	2,3
P2-SB-002	05/07/90	0.5-1	---	---	---	---	---	120	2.9	---	---	---	---	---	2,3	2,3
P2-SB-002	05/24/90	0.5-1	---	<20	---	---	---	---	---	---	2,3	---	---	---	---	---
P2-SB-002B	06/20/90	0.5-1	8.4	---	---	---	---	56	3.3	2,3	---	---	---	---	2,3	2,3
P2-SB-003	05/07/90	1-1.5	---	---	---	---	---	34	2.4	---	---	---	---	---	2,3	2,3
P2-SB-003	05/24/90	1-1.5	---	<20	---	---	---	---	---	---	2,3	---	---	---	---	---
P2-SB-003A	05/07/90	1.5-2	---	---	---	---	---	39	3	---	---	---	---	---	2,3	2,3
P2-SB-004	05/09/90	5	8.6	---	---	---	---	26	2.9	2,3	---	---	---	---	2,3	2,3
P2-SB-005	05/09/90	10	8.2	---	---	---	---	24	0.9	2,3	---	---	---	---	2,3	2,3
P2-SB-006	05/09/90	15	7.4	---	---	---	---	11	<0.3	2,3	---	---	---	---	2,3	2,3
P2-SB-007	05/09/90	20	8.2	---	---	---	---	19	<0.3	2,3	---	---	---	---	2,3	2,3
P2-SB-008	05/09/90	25	8.4	---	---	---	---	22	0.8	2,3	---	---	---	---	2,3	2,3
<b>Detention Pond Transfer Pipe</b>																
SS13293	03/02/93		---	---	---	---	---	655	---	---	---	---	---	---	6	---
SS23293	03/02/93		---	---	---	---	---	1,010	---	---	---	---	---	---	6	---



**Table A17-1**  
**Historical Data - Soil**  
**Data Tables and Reference Guide**

Sample Data										References						
Sample ID	Sample Date	Sample Depth (ft)	pH (pH units)	TPH (mg/kg)	Calcium (mg/kg)	Chloride (mg/kg)	Sulfate (mg/kg)	Lead (mg/kg)	Cadmium (mg/kg)	pH	TPH	Calcium	Chloride	Sulfate	Lead	Cadmium
<b>Miscellaneous Stained Soils</b>																
MISOIL #1R	10/12/94		7.5	---	68800	12.4	554	989	27.4	4	---	4	4	4	---	---
MISOIL #1R	10/03/94		7.48	---	78300	334	11700	5,980	97.1	5	---	5	5	5	---	---
MISOIL #2R	10/12/94		7.7	---	72000	16.1	535	822	4.8	4	---	4	4	4	---	---
MISOIL #2R	10/03/94		6.32	---	37000	2350	175000	985	172	5	---	5	5	5	---	---
MISOIL #3R	10/12/94		7.5	---	70500	7.48	57.3	1,010	6.8	4	---	4	4	4	---	---
MISOIL #3R	10/03/94		7.91	---	75300	9.98	727	299	4.6	5	---	5	5	5	---	---
MISOIL #4R	10/12/94		7.8	---	71500	<5	54.2	699	8.1	4	---	4	4	4	---	---
MISOIL #4R	10/03/94		8.84	---	86900	<120	7030	486	6.5	5	---	5	5	5	---	---
<b>Truck Staging Area</b>																
TS-1	06/04/98		---	---	---	---	---	84.6	---	---	---	---	---	---	7	---
TS-2	06/04/98		---	---	---	---	---	53.3	---	---	---	---	---	---	7	---
NTS 1	06/04/98		---	---	---	---	---	381	---	---	---	---	---	---	7	---
NTS 2	06/04/98		---	---	---	---	---	11300	---	---	---	---	---	---	7	---
<b>Railroad Spur</b>																
RRS #1b	06/18/98	0.5-1	---	---	---	---	---	1290	---	---	---	---	---	---	7	---
RRS #1c	06/18/98	1-1.5	---	---	---	---	---	10100	---	---	---	---	---	---	7	---
RRS #1c (dup)	06/18/98	1-1.5	---	---	---	---	---	13300	---	---	---	---	---	---	7	---
RRS #1d	06/18/98	1.5-2	---	---	---	---	---	987	---	---	---	---	---	---	7	---
RRS #1e	06/18/98	2-4	---	---	---	---	---	16.5	---	---	---	---	---	---	7	---
RRS #1e (dup)	06/18/98	2-4	---	---	---	---	---	10.7	---	---	---	---	---	---	7	---
RRS #2a	06/18/98	0-0.5	---	---	---	---	---	8240	---	---	---	---	---	---	7	---
RRS #2b	06/18/98	0.5-1	---	---	---	---	---	4890	---	---	---	---	---	---	7	---
RRS #2c	06/18/98	1-1.5	---	---	---	---	---	1510	---	---	---	---	---	---	7	---
RRS #2d	06/19/98	1.5-2	---	---	---	---	---	74.8	---	---	---	---	---	---	7	---
RRS #2e	06/20/98	2-4	---	---	---	---	---	59.9	---	---	---	---	---	---	7	---
RRS #3b	06/18/98	0.5-1	---	---	---	---	---	30200	---	---	---	---	---	---	7	---
RRS #3c	06/18/98	1-1.5	---	---	---	---	---	657	---	---	---	---	---	---	7	---
RRS #3d	06/18/98	1.5-2	---	---	---	---	---	214	---	---	---	---	---	---	7	---
RRS #3e	06/18/98	2-4	---	---	---	---	---	65.9	---	---	---	---	---	---	7	---
RRS #4c	06/18/98	1-1.5	---	---	---	---	---	8000	---	---	---	---	---	---	7	---
RRS #4d	06/18/98	1.5-2	---	---	---	---	---	1420	---	---	---	---	---	---	7	---
RRS #4e	06/18/98	2-4	---	---	---	---	---	1370	---	---	---	---	---	---	7	---
RRS #4f	06/18/98	2-4	---	---	---	---	---	179	---	---	---	---	---	---	7	---
<b>Area Adjacent to B7R</b>																
NTSB #1e (GNB RFI)	06/18/98	2-4	---	---	---	---	---	57.8	---	---	---	---	---	---	7	---
NTSB #1f	06/18/98	2-4	---	---	---	---	---	85.2	---	---	---	---	---	---	7	---
NTSB #1g	06/18/98	2-4	---	---	---	---	---	93.5	---	---	---	---	---	---	7	---
NTSB #1g (dup)	06/18/98	2-4	---	---	---	---	---	21.9	---	---	---	---	---	---	7	---



**Table A17-1**  
**Historical Data - Soil**  
**Data Tables and Reference Guide**

Sample Data										References						
Sample ID	Sample Date	Sample Depth (ft)	pH (pH units)	TPH (mg/kg)	Calcium (mg/kg)	Chloride (mg/kg)	Sulfate (mg/kg)	Lead (mg/kg)	Cadmium (mg/kg)	pH	TPH	Calcium	Chloride	Sulfate	Lead	Cadmium
<b>South Disposal Area</b>																
SDA #1a	06/18/98	0-0.5	---	---	---	---	---	201	---	---	---	---	---	---	7	---
SDA #1b	06/18/98	0.5-1	---	---	---	---	---	72.5	---	---	---	---	---	---	7	---
SDA #1c	06/18/98	1-1.5	---	---	---	---	---	10.9	---	---	---	---	---	---	7	---
SDA #1d	06/18/98	1.5-2	---	---	---	---	---	21	---	---	---	---	---	---	7	---
SDA #1e	06/18/98	2-4	---	---	---	---	---	14.1	---	---	---	---	---	---	7	---
SDA #2a	06/18/98	0-0.5	---	---	---	---	---	7030	---	---	---	---	---	---	7	---
SDA #2b	06/18/98	0.5-1	---	---	---	---	---	19.1	---	---	---	---	---	---	7	---
SDA #2c	06/18/98	1-1.5	---	---	---	---	---	10.8	---	---	---	---	---	---	7	---
SDA #2d	06/18/98	1.5-2	---	---	---	---	---	17.8	---	---	---	---	---	---	7	---
SDA #2e	06/18/98	2-4	---	---	---	---	---	29.8	---	---	---	---	---	---	7	---
SDA #3a	06/18/98	0-0.5	---	---	---	---	---	6020	---	---	---	---	---	---	7	---
SDA #3b	06/18/98	0.5-1	---	---	---	---	---	42.9	---	---	---	---	---	---	7	---
SDA #3c	06/18/98	1-1.5	---	---	---	---	---	21.8	---	---	---	---	---	---	7	---
SDA #3d	06/18/98	1.5-2	---	---	---	---	---	30.1	---	---	---	---	---	---	7	---
SDA #3e	06/18/98	2-4	---	---	---	---	---	10.8	---	---	---	---	---	---	7	---
SDA #3e (dup)	06/18/98	2-4	---	---	---	---	---	274	---	---	---	---	---	---	7	---
SDA #4a	06/18/98	0-0.5	---	---	---	---	---	17800	---	---	---	---	---	---	7	---
SDA #4b	06/18/98	0.5-1	---	---	---	---	---	61	---	---	---	---	---	---	7	---
SDA #4c	06/18/98	1-1.5	---	---	---	---	---	55.2	---	---	---	---	---	---	7	---
SDA #4d	06/18/98	1.5-2	---	---	---	---	---	24.2	---	---	---	---	---	---	7	---
SDA #4e	06/18/98	2-4	---	---	---	---	---	9.4	---	---	---	---	---	---	7	---
SDA #4e	06/18/98	2-4	---	---	---	---	---	21.7	---	---	---	---	---	---	7	---
SDA #5a	06/18/98	0-0.5	---	---	---	---	---	292	---	---	---	---	---	---	7	---
SDA #5b	06/18/98	0.5-1	---	---	---	---	---	1100	---	---	---	---	---	---	7	---
SDA #5c	06/18/98	1-1.5	---	---	---	---	---	16.1	---	---	---	---	---	---	7	---
SDA #5c (dup)	06/18/98	1-1.5	---	---	---	---	---	23.2	---	---	---	---	---	---	7	---
SDA #5d	06/18/98	1.5-2	---	---	---	---	---	24.9	---	---	---	---	---	---	7	---
SDA #5e	06/18/98	2-4	---	---	---	---	---	5.69	---	---	---	---	---	---	7	---
SDA #6a	06/18/98	0-0.5	---	---	---	---	---	317	---	---	---	---	---	---	7	---
SDA #6b	06/18/98	0.5-1	---	---	---	---	---	25.2	---	---	---	---	---	---	7	---
SDA #6c	06/18/98	1-1.5	---	---	---	---	---	42.6	---	---	---	---	---	---	7	---
SDA #6d	06/18/98	1.5-2	---	---	---	---	---	11.5	---	---	---	---	---	---	7	---
SDA #6e	06/18/98	2-4	---	---	---	---	---	<5	---	---	---	---	---	---	7	---
SDA #7a	06/18/98	0-0.5	---	---	---	---	---	274	---	---	---	---	---	---	7	---
SDA #7b	06/18/98	0.5-1	---	---	---	---	---	17.6	---	---	---	---	---	---	7	---
SDA #7c	06/18/98	1-1.5	---	---	---	---	---	13.2	---	---	---	---	---	---	7	---
SDA #7d	06/18/98	1.5-2	---	---	---	---	---	<5	---	---	---	---	---	---	7	---
SDA #7e	06/18/98	2-4	---	---	---	---	---	12.4	---	---	---	---	---	---	7	---
SDA #7e (dup)	06/18/98	2-4	---	---	---	---	---	7.29	---	---	---	---	---	---	7	---
SDA #8f	06/18/98	2-4	---	---	---	---	---	809	---	---	---	---	---	---	7	---
SDA #8g	06/18/98	2-4	---	---	---	---	---	1240	---	---	---	---	---	---	7	---



**Table A17-1**  
**Historical Data - Soil**  
**Data Tables and Reference Guide**

Sample Data										References						
Sample ID	Sample Date	Sample Depth (ft)	pH (pH units)	TPH (mg/kg)	Calcium (mg/kg)	Chloride (mg/kg)	Sulfate (mg/kg)	Lead (mg/kg)	Cadmium (mg/kg)	pH	TPH	Calcium	Chloride	Sulfate	Lead	Cadmium
<b>South Disposal Area</b>																
SDA #8h	06/18/98	2-4	---	---	---	---	---	78.9	---	---	---	---	---	---	7	---
SDA #8i	06/18/98	2-4	---	---	---	---	---	<5	---	---	---	---	---	---	7	---
SDA #9-1a	06/18/98	0-0.5	---	---	---	---	---	2540	---	---	---	---	---	---	7	---
SDA #9-1b	06/18/98	0.5-1	---	---	---	---	---	28800	---	---	---	---	---	---	7	---
SDA #9-1c	06/18/98	1-1.5	---	---	---	---	---	328	---	---	---	---	---	---	7	---
SDA #9-2a	06/18/98	0-0.5	---	---	---	---	---	20500	---	---	---	---	---	---	7	---
SDA #9-2b	06/18/98	0.5-1	---	---	---	---	---	17800	---	---	---	---	---	---	7	---
SDA #9-2c	06/18/98	1-1.5	---	---	---	---	---	1060	---	---	---	---	---	---	7	---
SDA #9-2d	06/18/98	1.5-2	---	---	---	---	---	784	---	---	---	---	---	---	7	---
SDA #9-2e	06/18/98	2-4	---	---	---	---	---	31.6	---	---	---	---	---	---	7	---
SDA #10a	06/18/98	0-0.5	---	---	---	---	---	114	---	---	---	---	---	---	7	---
SDA #10b	06/18/98	0.5-1	---	---	---	---	---	42.8	---	---	---	---	---	---	7	---
SDA #10c	06/18/98	1-1.5	---	---	---	---	---	36.2	---	---	---	---	---	---	7	---
SDA #10d	06/18/98	1.5-2	---	---	---	---	---	307	---	---	---	---	---	---	7	---
SDA #10e	06/18/98	2-4	---	---	---	---	---	10.8	---	---	---	---	---	---	7	---
SDA #10e (dup)	06/18/98	2-4	---	---	---	---	---	7.18	---	---	---	---	---	---	7	---
<b>Old Drum Storage Area</b>																
1	01/05/87		---	---	---	---	---	1,460	12	---	---	---	---	---	1	1
2	01/05/87		---	---	---	---	---	11,730	58	---	---	---	---	---	1	1
3	01/05/87		---	---	---	---	---	11,070	62	---	---	---	---	---	1	1
4	01/05/87		---	---	---	---	---	52,820	134	---	---	---	---	---	1	1
5	01/05/87		---	---	---	---	---	26,290	184	---	---	---	---	---	1	1
6	01/05/87		---	---	---	---	---	18,640	208	---	---	---	---	---	1	1
7	01/05/87		---	---	---	---	---	22,180	112	---	---	---	---	---	1	1
8	01/05/87		---	---	---	---	---	16,720	42	---	---	---	---	---	1	1
9	01/05/87		---	---	---	---	---	25,200	68	---	---	---	---	---	1	1
10	01/05/87		---	---	---	---	---	25,370	110	---	---	---	---	---	1	1

**Reference Summary**

Reference Number	Referenced Document
1	GNB Incorporated (GNB), 1987b. Letter to TWC RE: (1) Agreed Order Dated March 23, 1987 Between Water Commission and GNB Incorporated, Frisco, Texas (SWR# 30516), p. 5, Order (2); (2) Report "Soil Clean-Up of Old Drum Storage Area Enclosed (Enclosure 2) in letter dated April 29, 1987 to L. R. Soward from A.H. Larson - Certified Mail # P 649 040 215. June 16.
2	Lake Engineering, Inc. (Lake), 1991. RCRA Facility Investigation for GNB Incorporated, Frisco, Texas. May 8.
3	GNB Incorporated (GNB), 1987a. Interim Status Closure Plan for Battery Case Chip Waste Piles, May.
4	Delta Environmental Consultants (Delta), 1994. Miscellaneous Stained Soil Samples, October 20.
5	Delta Environmental Consultants (Delta), 1994. Miscellaneous Stained Soil Samples, October 6.
6	GNB Incorporated (GNB), 1993. Letter to TWC RE: Soil samples from transfer pipe GNB Incorporated, Frisco, Texas. March 25.
7	JD Consulting, L.P. (JDC), 1998. Phase II RFI Report, GNB Technologies, Inc., Frisco, Texas. August 28.

## Notes:

1. Sample locations shown as described in original referenced reports.
2. Data are from historical FRC documents. Not all data could be confirmed through comparison to original laboratory reports.



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
B-1	5/20/1983	8.76	< 0.01	---	0.004	< 0.01	0.022	112	1	1,3		1,3	24	1,3	1
	9/16/1983	---	< 0.01	---	< 0.01	---	---	---		2,3		2,3			
	5/22/1984	9.90	0.02	---	< 0.01	---	< 0.01	258	5	3,5*		3,5		3,5	5
	12/20/1984	10.90	< 0.01	---	< 0.01	---	< 0.01	189	6	3,6		3,6		6	6
	7/23/1985	---	< 0.01	---	< 0.01	---	< 0.01	204		24		24		24	24
	4/25/1986	---	0.01	---	---	---	---	---		3					
	1/26/1987	---	0.03	---	< 0.01	---	---	---		24		24			
	8/17/1987	---	< 0.05	< 0.05	< 0.01	< 0.01	---	---		3	4	3	4		
	12/16/1987	---	< 0.01	---	< 0.01	---	---	---		3		24			
	7/8/1988	---	< 0.05	---	< 0.05	---	---	---		3		24			
	12/19/1988	---	---	< 0.1	---	< 0.05	---	---		24	24		24		
	1/31/1989	---	< 0.005	< 0.005	< 0.01	< 0.01	---	---		9	9	9	9		
	2/1/1989	---	< 0.02	< 0.02	< 0.01	< 0.01	---	---		8	8	8	8		
	7/18/1989	---	< 0.005	< 0.005	< 0.01	< 0.01	---	---		24	24	24	24		
	2/8/1990	---	0.53	< 0.005	0.11	< 0.01	---	---		24	24	24	24		
	7/17/1990	8.30	0.15	0.001	< 0.005	< 0.005	---	---	24	10	10	10	10		
	7/18/1990	NS	---	---	---	< 0.005	---	---	24	24			24		
	July 1990	8.3	0.15	0.001	< 0.005	< 0.005	---	---	23	23	23	23	23		
	9/27/1990	---	0.026	0.005	< 0.005	< 0.005	---	---		10, 12*	10, 12*	10	10		
	Sept. 1990	7.5	0.026	0.005	< 0.005	< 0.005	---	---	23	23	23	23	23		
	12/5/1990	NS	---	---	---	---	---	---	24	24					
	12/6/1990	NS	---	---	---	---	---	---	24	24					
	12/12/1990	NS	---	---	---	---	---	---	24	24					
	12/13/1990	NS	NS	---	---	NS	---	---	24	24			24		
	12/20/1990	NS	---	NS	NS	NS	---	---	24	24	24	24	24		
	1/24/1991	NS	DRY	DRY	---	---	---	---	24	12	12				
	1/25/1991	7.50	0.06	---	< 0.005	NS	---	---	24	22		22	24		
	Jan 1991	---	0.06	NS	NS	< 0.005	---	---		23	23	23	23		
	3/7/1991	NS	---	---	---	---	---	---	24	24					
	3/8/1991	NS	NS	NS	---	---	---	---	24	12	12				
	3/9/1991	NS	---	---	NS	---	---	---	24	24		24			
	3/10/1991	NS	---	NS	---	NS	---	---	24	24	24		24		
	March 1991	NS	NS	NS	< 0.005	NS	---	---	23	23	23	23	23		
	6/29/1991	9.30	NS	NS	---	---	---	---	24	12	12				
	6/30/1991	---	0.06	---	< 0.005	NS	---	---		22		22	24		
	8/23/1991	8.90	0.44	0.009	---	---	---	---	24	12	12				
	8/25/1991	---	0.44	0.009	< 0.005	< 0.005	---	---		22	22	22	24		
	11/10/1991	NS	DRY	DRY	DRY	DRY	---	---	24	12, 22	12, 22	22	22		
	2/22/1992	---	0.01	< 0.002	---	---	---	---		12	12				
	2/23/1992	8.20	---	---	< 0.005	< 0.005	---	---	24	24		24	24		
	4/11/1992	---	DRY	DRY	---	---	---	---		12	12				
	4/12/1992	NS	---	---	DRY	---	---	---	24	24		24			
	6/12/1992	---	DRY	DRY	---	---	---	---		12	12				
	6/14/1992	7.30	---	---	DRY	---	---	---	24	24		24			
	8/8/1992	---	DRY	---	---	---	---	---		12					



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	8/9/1992	NS	---	---	DRY	---	---	---	24	24		24			
	10/9/1992	---	DRY	---	---	---	---	---		12					
	10/11/1992	NS	---	---	DRY	---	---	---	24	24		24			
	2/21/1993	NS	DRY	DRY	---	---	---	---	24	11	11				
	4/25/1993	NS	DRY	DRY	---	---	---	---	24	11	11				
	6/6/1993	6.30	DRY	DRY	---	---	---	---	24	11	11				
	8/8/1993	NS	DRY	DRY	---	---	---	---	24	11	11				
	10/8/1993	---	DRY	DRY	---	---	---	---		11	11				
	10/10/1993	NS	DRY	DRY	---	---	---	---	24	24	24				
	12/12/1993	NS	DRY	DRY	---	---	---	---	24	11	11				
	2/13/1994	NS	DRY	DRY	---	---	---	---	24	24	24				
	4/17/1994	NS	DRY	DRY	---	---	---	---	24	24	24				
	6/12/1994	NS	DRY	DRY	---	---	---	---	24	24	24				
	8/28/1994	NS	DRY	DRY	---	---	---	---	24	24	24				
	10/30/1994	NS	DRY	DRY	---	---	---	---	24	24	24				
	1/29/1995	NS	DRY	DRY	---	---	---	---	24	15	15				
	3/31/1995	---	DRY	DRY	---	---	---	---		15	15				
	5/21/1995	NS	DRY	DRY	---	---	---	---	24	15	15				
	7/30/1995	---	DRY	DRY	---	---	---	---		15	15				
	9/24/1995	NS	DRY	DRY	---	---	---	---	24	15	15				
	11/19/1995	6.90	DRY	DRY	---	---	---	---	24	15	15				
	1/27/1996	NS	NS	NS	---	---	---	---	24	14	14				
	3/31/1996	NS	DRY	DRY	---	---	---	---	24	14	14				
	5/19/1996	NS	NS	NS	---	---	---	---	24	24	24				
	7/21/1996	NS	NS	NS	---	---	---	---	24	24	24				
	9/8/1996	NS	NS	NS	---	---	---	---	24	14	14				
	11/10/1996	7.20	0.022	0.004	---	---	---	---	24	14	14				
	1/25/1997	NS	NS	NS	---	---	---	---	24	13	13				
	1/27/1997	---	DRY	DRY	---	---	---	---		24	24				
	3/15/1997	NS	---	---	---	---	---	---	24	24					
	3/16/1997	---	NS	NS	---	---	---	---		13	13				
	5/18/1997	NS	DRY	DRY	---	---	---	---	24	13	13				
	8/3/1997	NS	NS	NS	---	---	---	---	24	13	13				
	9/28/1997	NS	NS	NS	---	---	---	---	24	13	13				
	11/16/1997	NS	NS	NS	---	---	---	---	24	13	13				
	3/29/1998	NS	NS	NS	---	---	---	---	24	17	17				
	5/17/1998	NS	NS	NS	---	---	---	---	17	17	17				
	7/26/1998	DRY	DRY	DRY	---	---	---	---	17	17	17				
	9/27/1998	DRY	DRY	DRY	---	---	---	---	17	17	17				
	11/22/1998	6.91	0.049	<0.005	---	---	---	---	17	17	17				
	5/24/1999	NS	NS	NS	---	---	---	---	18	16, 18	16, 18				
	7/29/1999	NS	NS	NS	---	---	---	---	18	16, 18	16, 18				
	10/3/1999	NS	NS	NS	---	---	---	---	18	16, 18	16, 18				
	11/14/1999	---	---	---	---	---	---	---	18	18	18				
	1/16/2000	---	---	---	---	---	---	---	19	19	19				



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	4/9/2000	NS	DRY	DRY	---	---	---	---	24	24	24				
	7/30/2000	NS	NS	NS	---	---	---	---	24	24	24				
	3/23/2001	NS	NS	NS	---	---	---	---	20	20	20				
	7/1/2001	---	---	---	---	---	---	---	20	20	20				
	8/12/2001	NS	NS	NS	---	---	---	---	20	20	20				
	11/4/2001	NS	NS	NS	---	---	---	---	20	20	20				
	3/8/2002	NS	NS	NS	---	---	---	---	21	21	21				
	6/30/2002	NS	NS	NS	---	---	---	---	21	21	21				
	8/18/2002	NS	NS	NS	---	---	---	---	24	24	24				
	11/17/2002	NS	NS	NS	---	---	---	---	24	24	24				
	3/27/2003	NS	DRY	DRY	---	---	---	---	24	24	24				
	6/26/2003	NS	DRY	DRY	---	---	---	---	24	24	24				
	7/18/2003	NS	DRY	DRY	---	---	---	---	24	24	24				
	12/22/2003	NS	DRY	DRY	---	---	---	---	24	24	24				
	3/31/2004	NS	DRY	DRY	---	---	---	---	24	24	24				
	3/20/2005	NS	DRY	DRY	---	---	---	---	24	24	24				
	11/22/2005	NS	DRY	DRY	---	---	---	---	24	24	24				
<b>B1-S</b>	5/20/1983	---	NS	---	NS	< 0.01	---	---		24		24	24		
	9/16/1983	---	< 0.01	---	< 0.01	---	---	---		2		2			
	5/22/1984	7.30	< 0.01	---	< 0.01	---	< 0.01	400	5	3.5		5		5	5
	12/20/1984	7.40	< 0.01	---	< 0.01	---	< 0.01	244	6	3		3,6*		6	6
	7/23/1985	---	0.02	---	< 0.01	---	< 0.01	225		24		24		24	24
	4/25/1986	---	0.01	---	---	---	---	---		3					
	1/26/1987	---	0.02	---	< 0.01	---	---	---		24		24			
	8/17/1987	---	< 0.05	< 0.05	< 0.01	< 0.01	---	---		3	4	3	4		
	12/16/1987	---	< 0.01	---	< 0.01	---	---	---		3		24			
	7/8/1988	---	< 0.05	< 0.1	< 0.05	---	---	---		3	24	24			
	12/19/1988	---	< 0.05	---	---	< 0.05	---	---		24			24		
	1/31/1989	---	< 0.005	< 0.005	< 0.01	< 0.01	---	---		9	9	9	9		
	2/1/1989	---	< 0.02	< 0.02	< 0.01	< 0.01	---	---		8	8	8	8		
	7/18/1989	---	< 0.005	< 0.005	< 0.01	< 0.01	---	---		24	24	24	24		
	2/8/1990	---	< 0.005	< 0.005	< 0.01	< 0.01	---	---		24	24	24	24		
	7/17/1990	NS	NS	NS	NS	---	---	---	24	24	24	24			
	7/18/1990	NS	---	---	---	NS	---	---	24				24		
	9/27/1990	---	NS	NS	NS	NS	---	---		24	24	24	24		
	12/5/1990	NS	---	---	---	---	---	---	24						
	12/6/1990	NS	---	---	---	---	---	---	24						
	12/12/1990	NS	---	---	---	---	---	---	24						
	12/13/1990	NS	NS	---	---	NS	---	---	24	24			24		
	12/20/1990	NS	---	NS	NS	NS	---	---	24		24	24	24		
	1/24/1991	NS	---	NS	---	---	---	---	24		24				
	1/25/1991	NS	NS	---	NS	NS	---	---	24	24		24	24		
	3/7/1991	NS	---	---	---	---	---	---	24						
	3/8/1991	NS	NS	---	---	---	---	---	24	24					
	3/9/1991	NS	---	---	NS	---	---	---	24			24			



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	3/10/1991	NS	---	NS	---	NS	---	---	24		24		24		
	6/29/1991	NS	NS	NS	---	---	---	---	24	24	24				
	6/30/1991	---	---	---	NS	NS	---	---				24	24		
	8/23/1991	NS	NS	NS	---	---	---	---	24	24	24				
	8/25/1991	---	---	---	NS	NS	---	---				24	24		
	11/10/1991	NS	NS	NS	NS	NS	---	---	24	24	24	24	24		
	2/22/1992	---	NS	NS	---	---	---	---		24	24				
	2/23/1992	NS	---	---	NS	NS	---	---	24			24	24		
	4/11/1992	---	NS	NS	---	---	---	---		24	24				
	4/12/1992	NS	---	---	NS	---	---	---	24			24			
	6/12/1992	---	NS	NS	---	---	---	---		24	24				
	6/14/1992	NS	---	---	NS	---	---	---	24			24			
	8/8/1992	---	NS	---	---	---	---	---		24					
	8/9/1992	NS	---	---	NS	---	---	---	24			24			
	10/9/1992	---	NS	---	---	---	---	---		24					
	10/11/1992	NS	---	---	NS	---	---	---	24			24			
	2/21/1993	NS	NS	NS	---	---	---	---	24	24	24				
	4/25/1993	NS	NS	NS	---	---	---	---	24	24	24				
	6/6/1993	NS	NS	NS	---	---	---	---	24	24	24				
	8/8/1993	NS	NS	NS	---	---	---	---	24	24	24				
	10/10/1993	NS	NS	NS	---	---	---	---	24	24	24				
	12/12/1993	NS	NS	NS	---	---	---	---	24	24	24				
	2/13/1994	NS	NS	NS	---	---	---	---	24	24	24				
	4/17/1994	NS	NS	NS	---	---	---	---	24	24	24				
	6/12/1994	NS	NS	NS	---	---	---	---	24	24	24				
	8/28/1994	NS	NS	NS	---	---	---	---	24	24	24				
	10/30/1994	NS	NS	NS	---	---	---	---	24	24	24				
	1/29/1995	NS	NS	NS	---	---	---	---	24	24	24				
	5/21/1995	NS	NS	NS	---	---	---	---	24	24	24				
	7/30/1995	---	NS	NS	---	---	---	---		24	24				
	9/24/1995	NS	NS	NS	---	---	---	---	24	24	24				
	11/19/1995	NS	NS	NS	---	---	---	---	24	24	24				
	1/27/1996	NS	NS	NS	---	---	---	---	24	24	24				
	3/31/1996	NS	NS	NS	---	---	---	---	24	24	24				
	5/19/1996	NS	NS	NS	---	---	---	---	24	24	24				
	7/21/1996	NS	NS	NS	---	---	---	---	24	24	24				
	9/8/1996	NS	NS	NS	---	---	---	---	24	24	24				
	11/10/1996	NS	NS	NS	---	---	---	---	24	24	24				
	1/25/1997	NS	---	---	---	---	---	---	24						
	1/27/1997	---	NS	NS	---	---	---	---		24	24				
	3/15/1997	NS	---	---	---	---	---	---	24						
	3/16/1997	---	NS	NS	---	---	---	---		24	24				
	5/18/1997	NS	NS	NS	---	---	---	---	24	24	24				
	8/3/1997	NS	NS	NS	---	---	---	---	24	24	24				
	9/28/1997	NS	NS	NS	---	---	---	---	24	24	24				



**Table A17-2**  
**Historical Data - Groundwater Samples**  
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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	11/16/1997	NS	NS	NS	---	---	---	---	24	24	24				
	3/29/1998	NS	NS	NS	---	---	---	---	24	24	24				
	5/17/1998	NS	NS	NS	---	---	---	---	24	24	24				
	7/26/1998	NS	NS	NS	---	---	---	---	24	24	24				
	11/22/1998	NS	NS	NS	---	---	---	---	24	24	24				
	5/24/1999	NS	NS	NS	---	---	---	---	24	24	24				
	7/29/1999	NS	NS	NS	---	---	---	---	24	24	24				
	10/3/1999	NS	NS	NS	---	---	---	---	24	24	24				
	11/14/1999	NS	NS	NS	---	---	---	---	24	24	24				
	1/16/2000	NS	NS	NS	---	---	---	---	24	24	24				
	4/9/2000	NS	NS	NS	---	---	---	---	24	24	24				
	7/30/2000	NS	NS	NS	---	---	---	---	24	24	24				
	3/23/2001	NS	NS	NS	---	---	---	---	24	24	24				
	7/1/2001	NS	NS	NS	---	---	---	---	24	24	24				
	8/12/2001	NS	NS	NS	---	---	---	---	24	24	24				
	11/4/2001	NS	NS	NS	---	---	---	---	24	24	24				
	3/8/2002	NS	NS	NS	---	---	---	---	24	24	24				
	6/30/2002	NS	NS	NS	---	---	---	---	24	24	24				
	8/18/2002	NS	NS	NS	---	---	---	---	24	24	24				
	11/17/2002	NS	NS	NS	---	---	---	---	24	24	24				
	3/27/2003	NS	NS	NS	---	---	---	---	24	24	24				
	6/26/2003	NS	NS	NS	---	---	---	---	24	24	24				
	7/18/2003	NS	NS	NS	---	---	---	---	24	24	24				
	12/22/2003	NS	NS	NS	---	---	---	---	24	24	24				
	3/31/2004	NS	NS	NS	---	---	---	---	24	24	24				
	3/20/2005	NS	NS	NS	---	---	---	---	24	24	24				
	11/22/2005	NS	NS	NS	---	---	---	---	24		24				
<b>B-2</b>	5/20/1983	7.47	0.13	---	0.017	< 0.01	0.002	1,200	1	1,3		1,3		1	1
	9/16/1983	---	< 0.01	---	< 0.01	---	---	---		2,3		2,3			
	5/22/1984	6.30	< 0.01	---	< 0.01	---	0.02	2539	5	3,5		3,5		5	5
	12/20/1984	6.20	< 0.01	---	0.02	---	0.02	5580	6	3,6		3,6		6	6
	7/23/1985	---	< 0.01	---	0.04	---	< 0.01	5500		24		24		24	24
	4/25/1986	---	0.02	---	---	---	---	---		3					
	1/26/1987	---	0.1	---	0.05	---	---	---		24		24			
	8/17/1987	---	< 0.05	< 0.05	< 0.01	< 0.01	---	---		3	4	3	4		
	12/16/1987	---	< 0.01	---	< 0.01	---	---	---		3		24			
	7/8/1988	---	< 0.05	< 0.1	< 0.05	---	---	---		3	24	24			
	12/19/1988	---	< 0.05	---	---	< 0.05	---	---		24			24		
	1/31/1989	---	< 0.005	< 0.005	< 0.01	0.01	---	---		9	9	9	9		
	2/1/1989	---	0.11	0.1	0.03	0.03	---	---		8	8	8	8		
	7/18/1989	---	< 0.005	< 0.005	0.011	< 0.01	---	---		24	24	24	24		
	2/8/1990	---	< 0.005	< 0.005	0.22	0.23	---	---		24	24	24	24		
	7/17/1990	5.30	0.005	0.002	< 0.005	< 0.005	---	---	10	10	10	10	10		
	7/18/1990	NS	---	---	---	< 0.005	---	---					24		
	July 1990	5.3	0.005	0.002	< 0.005	< 0.005	---	---	23	23	23	23	23		



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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	9/27/1990	---	0.008	0.008	< 0.005	< 0.005	---	---		10, 12*	10, 12*	10	10		
	Sept. 1990	4.7	0.008	0.008	< 0.005	< 0.005	---	---	23	23	23	23	23		
	12/5/1990	NS	0.006	0.006	---	---	---	---	24	12	12				
	12/6/1990	4.70	0.006	0.006	< 0.005	< 0.005	---	---	24	10, 22	10, 22	10, 22	10, 22		
	12/12/1990	NS	---	---	---	---	---	---	24						
	12/13/1990	NS	0.006	---	---	< 0.005	---	---	24	24			24		
	12/20/1990	NS	---	0.006	< 0.005	NS	---	---	24		24	24	24		
	1/24/1991	NS	---	NS	---	---	---	---	24		24				
	1/25/1991	NS	NS	---	NS	NS	---	---	24	24			24		
	Jan. 1991	---	0.006	0.006	< 0.005	< 0.005	---	---		23	23	23	23		
	3/7/1991	NS	---	---	---	---	---	---	24						
	3/8/1991	NS	0.009	0.005	---	< 0.005	---	---	24	12	10, 12		10		
	3/9/1991	4.20	0.009	0.005	< 0.005	---	---	---	10	10, 22	22	10, 22			
	3/10/1991	NS	---	0.005	---	< 0.005	---	---	24		24		24		
	March 1991	4.2	0.009	0.005	< 0.005	< 0.006	---	---	23	23	23	23	23		
	6/29/1991	4.70	0.016	0.018	---	---	---	---	24	12	12				
	6/30/1991	---	0.016	0.018	< 0.005	< 0.005	---	---		22	22	22	24		
	8/23/1991	4.50	0.006	0.002	---	---	---	---	24	12	12				
	8/25/1991	---	0.006	0.002	< 0.005	< 0.005	---	---		24	24	22	24		
	11/10/1991	4.40	0.012	0.009	< 0.005	< 0.005	---	---	24	12, 22	12, 22	22	24		
	2/22/1992	---	0.001	0.006	---	---	---	---		12	12				
	2/23/1992	4.30	---	---	< 0.005	< 0.005	---	---	24			24	24		
	4/11/1992	---	< 0.002	0.003	---	---	---	---		12	12				
	4/12/1992	4.30	---	---	< 0.005	---	---	---	24			24			
	6/12/1992	---	0.004	< 0.002	---	---	---	---		12	12				
	6/14/1992	4.50	---	---	< 0.005	---	---	---	24			24			
	8/8/1992	---	0.005	---	---	---	---	---		12					
	8/9/1992	5.60	---	---	< 0.005	---	---	---	24			24			
	10/9/1992	---	0.007	---	---	---	---	---		12					
	10/11/1992	4.50	---	---	< 0.005	---	---	---	24			24			
	2/21/1993	4.70	0.004	0.004	---	---	---	---	24	11	11				
	4/25/1993	4.50	0.008	0.008	---	---	---	---	24	11	11				
	6/6/1993	5.00	0.007	0.006	---	---	---	---	24	11	11				
	8/8/1993	4.70	0.006	< 0.002	---	---	---	---	24	11	11				
	10/8/1993	---	0.006	0.004	---	---	---	---		11	11				
	10/10/1993	3.80	0.006	0.004	---	---	---	---	24	24	24				
	12/12/1993	4.00	0.005	0.005	---	---	---	---	24	11	11				
	2/13/1994	4.80	0.007	0.007	---	---	---	---	24	24	24				
	4/17/1994	4.40	0.006	0.006	---	---	---	---	24	24	24				
	6/12/1994	4.00	0.012	0.003	---	---	---	---	24	24	24				
	8/28/1994	4.70	< 0.001	< 0.001	---	---	---	---	24	24	24				
	10/30/1994	4.00	0.013	0.008	---	---	---	---	24	24	24				
	1/29/1995	4.30	0.006	0.006	---	---	---	---	24	15	15				
	3/31/1995	---	0.009	0.004	---	---	---	---		15	15				
	5/21/1995	3.50	0.011	0.005	---	---	---	---	24	15	15				



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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	7/30/1995	---	0.014	0.008	---	---	---	---		15	15				
	9/24/1995	3.50	0.009	0.018	---	---	---	---	24	15	15				
	11/19/1995	3.20	0.005	0.006	---	---	---	---	24	15	15				
	1/27/1996	4.20	0.004	0.006	---	---	---	---	24	14	14				
	3/31/1996	3.30	0.006	0.006	---	---	---	---	24	14	14				
	5/19/1996	3.20	0.004	0.007	---	---	---	---	24	14	14				
	7/21/1996	4.00	0.009	0.006	---	---	---	---	24	14	14				
	9/8/1996	3.60	0.007	0.005	---	---	---	---	24	14	14				
	11/10/1996	3.90	0.006	0.008	---	---	---	---	24	14	14				
	1/27/1997	3.60	0.008	0.008	---	---	---	---	24	13	13				
	3/15/1997	3.80	---	---	---	---	---	---	24						
	3/16/1997	---	0.006	0.006	---	---	---	---		13	13				
	5/18/1997	3.80	0.007	0.007	---	---	---	---	24	13	13				
	8/3/1997	3.89	0.009	0.003	---	---	---	---	24	13	13				
	9/28/1997	3.90	0.015	0.006	---	---	---	---	24	13	13				
	11/16/1997	3.59	0.007	0.008	---	---	---	---	24	13	13				
	3/29/1998	4.18	0.002	<0.002	---	---	---	---	17	17	17				
	5/17/1998	4.18	NS	NS	---	---	---	---	17	17	17				
	7/26/1998	NS	NS	NS	---	---	---	---	17	17	17				
	9/27/1998	3.81	< 0.001	< 0.001	---	---	---	---	17	17	17				
	11/22/1998	4.05	<0.005	<0.005	---	---	---	---	17	17	17				
	5/24/1999	NS	0.012	< 0.005	---	---	---	---	18	16, 18	16, 18				
	7/29/1999	NS	< 0.005	< 0.005	---	---	---	---	18	16, 18	16, 18				
	10/3/1999	NS	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	11/14/1999	---	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	1/16/2000	---	---	---	---	---	---	---	19	19	19				
	4/9/2000	4.00	0.04	0.011	---	---	---	---	24	24	24				
	7/30/2000	3.73	0.028	< 0.010	---	---	---	---	24	24	24				
	3/23/2001	NS	< 0.010	0.011	---	---	---	---	20	20	20				
	7/1/2001	---	< 0.010	< 0.010	---	---	---	---	20	20	20				
	8/12/2001	NS	0.012	< 0.010	---	---	---	---	20	20	20				
	11/4/2001	NS	0.015	0.011	---	---	---	---	20	20	20				
	3/8/2002	NS	NS	NS	---	---	---	---	21	21	21				
	6/30/2002	NS	NS	NS	---	---	---	---	21	21	21				
	8/18/2002	NS	NS	NS	---	---	---	---	24	24	24				
	11/17/2002	3.80	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/27/2003	4.02	0.008	0.016	---	---	---	---	24	24	24				
	6/26/2003	NS	NS	NS	---	---	---	---	24	24	24				
	7/18/2003	NS	DRY	DRY	---	---	---	---	24	24	24				
	12/22/2003	NS	DRY	DRY	---	---	---	---	24	24	24				
	3/31/2004	NS	DRY	DRY	---	---	---	---	24	24	24				
	3/20/2005	3.87	0.013	< 0.006	---	---	---	---	24	24	24				
	11/22/2005	NS	DRY	DRY	---	---	---	---	24	24	24				
<b>B-3</b>	5/20/1983	8.96	< 0.01	---	0.015	< 0.01	0.013	201	1	1,3		1,3	24	1	1
	9/16/1983	---	< 0.01	---	< 0.01	---	---	---		2,3		2,3			



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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	5/22/1984	7.70	< 0.01	---	< 0.01	---	0.02	506	5	3,5		3,5		5	5
	12/20/1984	7.90	< 0.01	---	0.01	---	< 0.01	854	6	3,6		3,6		6	6
	7/23/1985	---	< 0.01	---	< 0.01	---	< 0.01	839		24		24		24	24
	4/25/1986	---	0.02	---	---	---	---	---		3					
	1/26/1987	---	0.07	---	< 0.01	---	---	---		24		24			
	8/17/1987	---	< 0.05	< 0.05	< 0.01	< 0.01	---	---		3	4	3	4		
	12/16/1987	---	< 0.01	---	NS	---	---	---		3		24			
	7/8/1988	---	< 0.05	< 0.1	< 0.05	---	---	---		3	24	24			
	12/19/1988	---	< 0.05	---	---	< 0.05	---	---		24			24		
	1/31/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/1/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/18/1989	---	< 0.005	< 0.005	< 0.01	< 0.01	---	---		24	24	24	24		
	9/27/1990	---	0.015	0.002	< 0.005	< 0.005	---	---		10,12*	10,12*	10	10		
	2/8/1990	---	0.19	< 0.005	0.07	< 0.01	---	---		24	24	24	24		
	7/17/1990	6.00	0.038	< 0.001	< 0.005	< 0.005	---	---	10	10	10	10	10		
	7/18/1990	NS	---	---	---	---	---	---	24						
	July 1990	6	0.038	0.001	< 0.005	< 0.005	---	---	23	23	23	23	23		
	9/27/1990	---	0.038	0.001	< 0.005	< 0.005	---	---		24	24	24	24		
	Sept. 1990	6.2	0.015	0.002	< 0.005	< 0.005	---	---	23	23	23	23	24		
	12/5/1990	NS	0.028	0.028	---	---	---	---	24	12	12				
	12/6/1990	6.20	0.028	0.028	< 0.005	< 0.005	---	---	24	10, 22	22	10, 22	22		
	12/12/1990	NS	---	---	---	---	---	---	24						
	12/13/1990	NS	0.028	---	---	< 0.005	---	---	24	24			24		
	12/20/1990	NS	---	0.028	< 0.005	NS	---	---	24		24	24	24		
	1/24/1991	NS	---	NS	---	---	---	---	24		24				
	1/25/1991	NS	NS	---	NS	NS	---	---	24	24		24	24		
	Jan. 1991	---	0.028	0.028	< 0.005	< 0.005	---	---		23	23	23	23		
	3/7/1991	NS	0.016	< 0.001	---	---	---	---	24	12	12				
	3/8/1991	5.70	0.016	< 0.001	< 0.005	< 0.005	---	---	10	10, 22	10, 22	10, 22	10		
	3/9/1991	NS	---	---	< 0.005	---	---	---	24						
	3/10/1991	NS	---	< 0.001	---	< 0.005	---	---	24				24		
	March 1991	5.7	0.016	< 0.001	< 0.005	< 0.005	---	---	23	23	23	23	23		
	6/29/1991	6.00	0.017	0.003	---	---	---	---	24	12	12				
	6/30/1991	---	0.017	0.003	< 0.005	< 0.005	---	---		22	22	22	24		
	8/23/1991	6.30	0.012	< 0.001	---	---	---	---	24	12	12				
	8/25/1991	---	0.012	< 0.001	< 0.005	< 0.005	---	---		22	22	22	24		
	11/10/1991	5.60	0.012	< 0.002	< 0.005	< 0.005	---	---	24	12, 22	12, 22	22	24		
	2/22/1992	---	0.007	0.002	---	---	---	---		12	12				
	2/23/1992	5.30	---	---	< 0.005	< 0.005	---	---	24			24	24		
	4/11/1992	---	0.005	< 0.002	---	---	---	---		12	12				
	4/12/1992	5.50	---	---	< 0.005	---	---	---	24			24			
	6/12/1992	---	< 0.002	< 0.002	---	---	---	---		12	12				
	6/14/1992	5.90	---	---	< 0.005	---	---	---	24			24			
	8/8/1992	---	< 0.002	---	---	---	---	---		12					
	8/9/1992	6.70	---	---	< 0.005	---	---	---	24			24			



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	10/9/1992	---	DRY	---	---	---	---	---		12					
	10/11/1992	6.10	---	---	DRY	---	---	---	24			24			
	2/21/1993	6.40	0.006	< 0.002	---	---	---	---	24	11	11				
	4/25/1993	5.50	0.005	< 0.002	---	---	---	---	24	11	11				
	6/6/1993	6.70	0.004	0.008	---	---	---	---	24	11	11				
	8/8/1993	6.20	0.012	<0.002	---	---	---	---	24	11	11				
	10/8/1993	---	DRY	DRY	---	---	---	---		11	11				
	10/10/1993	NS	DRY	DRY	---	---	---	---	24	24	24				
	12/12/1993	5.30	0.007	<0.002	---	---	---	---	24	11	11				
	2/13/1994	6.20	0.009	0.005	---	---	---	---	24	24	24				
	4/17/1994	5.50	0.007	0.006	---	---	---	---	24	24	24				
	6/12/1994	6.30	0.006	<0.002	---	---	---	---	24	24	24				
	8/28/1994	5.20	0.004	<0.002	---	---	---	---	24	24	24				
	10/30/1994	5.00	0.019	<0.002	---	---	---	---	24	24	24				
	1/29/1995	6.20	0.002	<0.002	---	---	---	---	24	15	15				
	3/31/1995	---	0.002	<0.002	---	---	---	---		15	15				
	5/21/1995	5.80	0.006	<0.002	---	---	---	---	24	15	15				
	7/30/1995	---	0.008	<0.002	---	---	---	---		15	15				
	9/24/1995	4.80	NS	NS	---	---	---	---	24	15	15				
	11/19/1995	NS	NS	NS	---	---	---	---	24	15	15				
	1/27/1996	NS	NS	NS	---	---	---	---	24	14	14				
	3/31/1996	NS	DRY	DRY	---	---	---	---	24	14	14				
	5/19/1996	NS	NS	NS	---	---	---	---	24	24	24				
	7/21/1996	NS	DRY	DRY	---	---	---	---	24	24	24				
	9/8/1996	NS	NS	NS	---	---	---	---	24	14	14				
	11/10/1996	6.80	< 0.002	0.003	---	---	---	---	24	14	14				
	1/25/1997	5.90	< 0.002	< 0.002	---	---	---	---	24	13	13				
	1/27/1997	---	< 0.002	< 0.002	---	---	---	---		24	24				
	3/15/1997	5.70	---	---	---	---	---	---	24						
	3/16/1997	---	< 0.002	< 0.002	---	---	---	---		13	13				
	5/18/1997	5.80	0.003	< 0.002	---	---	---	---	24	13	13				
	8/3/1997	6.06	0.005	0.002	---	---	---	---	24	13	13				
	9/28/1997	6.05	0.003	< 0.002	---	---	---	---	24	13	13				
	11/16/1997	6.03	0.008	< 0.002	---	---	---	---	24	13	13				
	3/29/1998	5.69	0.003	<0.002	---	---	---	---	17	17	17				
	5/17/1998	5.69	< 0.002	< 0.002	---	---	---	---	17	17	17				
	7/26/1998	6.21	0.013	<0.002	---	---	---	---	17	17	17				
	9/27/1998	DRY	DRY	DRY	---	---	---	---	17	17	17				
	11/22/1998	5.74	<0.005	<0.005	---	---	---	---	17	17	17				
	5/24/1999	NS	0.0076	0.0077	---	---	---	---	18	16, 18	16, 18				
	7/29/1999	NS	0.017	< 0.005	---	---	---	---	18	16, 18	16, 18				
	10/3/1999	NS	NS	NS	---	---	---	---	18	16, 18	16, 18				
	11/14/1999	DRY	DRY	DRY	---	---	---	---	18	18	18				
	1/16/2000	DRY	DRY	DRY	---	---	---	---	19	19	19				
	4/9/2000	5.62	< 0.010	< 0.010	---	---	---	---	24	24	24				



**Table A17-2**  
**Historical Data - Groundwater Samples**  
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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	7/30/2000	5.93	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/23/2001	DRY	< 0.010	< 0.010	---	---	---	---	20	20	20				
	7/1/2001	DRY	< 0.010	< 0.010	---	---	---	---	20	20	20				
	8/12/2001	DRY	< 0.010	< 0.010	---	---	---	---	20	20	20				
	11/4/2001	DRY	DRY	DRY	---	---	---	---	20	20	20				
	3/8/2002	DRY	0.014	< 0.010	---	---	---	---	21	21	21				
	6/30/2002	DRY	DRY	DRY	---	---	---	---	21	21	21				
	8/18/2002	NS	NS	NS	---	---	---	---	24	24	24				
	11/17/2002	6.10	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/27/2003	5.79	0.006	0.008	---	---	---	---	24	24	24				
	6/26/2003	6.10	0.006	< 0.006	---	---	---	---	24	24	24				
	7/18/2003	5.87	< 0.006	< 0.006	---	---	---	---	24	24	24				
	12/22/2003	NS	DRY	DRY	---	---	---	---	24	24	24				
	3/31/2004	5.87	< 0.006	< 0.006	---	---	---	---	24	24	24				
	3/20/2005	5.72	< 0.006	< 0.006	---	---	---	---	24	24	24				
	11/22/2005	NS	DRY	DRY	---	---	---	---	24	24	24				
<b>B-4</b>	5/20/1983	8.61	< 0.01	---	0.002	---	0.014	137	1	1,3		1,3		1	1
	9/16/1983	---	< 0.01	---	< 0.01	---	---	---		2,3		2,3			
	5/22/1984	8.00	< 0.01	---	0.01	---	< 0.01	410	5	3,5		3,5		5	5
	12/20/1984	8.20	< 0.01	---	< 0.01	---	< 0.01	247	6	3,6		3,6		6	6
	7/23/1985	---	< 0.01	---	< 0.01	---	< 0.01	839		24		24		24	24
	4/25/1986	---	< 0.05	---	---	---	---	---		3					
	1/26/1987	---	0.05	---	< 0.01	---	---	---		24		24			
	8/17/1987	---	< 0.05	< 0.05	< 0.01	< 0.01	---	---		3	4	3	4		
	12/16/1987	---	< 0.01	---	< 0.01	---	---	---		3		24			
	7/8/1988	---	< 0.05	< 0.1	< 0.05	---	---	---		3	24	24			
	12/19/1988	---	< 0.05	---	---	< 0.05	---	---		24			24		
	1/31/1989	---	0.006	< 0.005	< 0.01	0.01	---	---		9	9	9	9		
	2/1/1989	---	< 0.02	< 0.02	< 0.01	< 0.01	---	---		8	8	8	8		
	7/18/1989	---	< 0.005	< 0.005	< 0.01	< 0.01	---	---		24	24	24	24		
	2/8/1990	---	< 0.005	< 0.005	< 0.01	< 0.01	---	---		24	24	24	24		
	7/17/1990	7.30	0.016	< 0.001	< 0.005	< 0.005	---	---	10	10	10	10	10		
	7/18/1990	NS	---	---	---	< 0.005	---	---	24				24		
	July 1990	7.3	0.016	0.001	< 0.005	< 0.005	---	---	23	23	23	23	23		
	9/27/1990	---	0.016	0.001	NS	NS	---	---		12	12	24	24		
	Sept. 1990	DRY	DRY	DRY	DRY	DRY	---	---	23	23	23	23	23		
	12/5/1990	NS	---	---	---	---	---	---	24						
	12/6/1990	DRY	DRY	DRY	---	---	---	---	24	12	12	24			
	12/12/1990	NS	---	---	---	---	---	---	24						
	12/13/1990	NS	DRY	---	---	NS	---	---	24	24					
	12/20/1990	NS	---	DRY	NS	NS	---	---	24			24			
	1/24/1991	NS	---	NS	---	---	---	---	24						
	1/25/1991	NS	DRY	---	NS	NS	---	---	24	24		24			
	Jan. 1991	---	DRY	DRY	DRY	DRY	---	---		23	23	23	23		
	3/7/1991	NS	DRY	DRY	---	---	---	---		12	12	24			



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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	3/8/1991	DRY	DRY	---	NS	---	---	---	24	24		24			
	3/9/1991	NS	---	---	---	---	---	---	24						
	3/10/1991	NS	---	DRY	DRY	NS	---	---	24		24	24			
	March 1991	DRY	DRY	DRY	DRY	DRY	---	---	23	23	23	23	23		
	6/29/1991	6.40	DRY	DRY	NS	---	---	---	24	12	12	24			
	6/30/1991	---	---	---	---	DRY	---	---							
	8/23/1991	6.00	DRY	DRY	NS	---	---	---	24	12	12	24			
	8/25/1991	---	DRY	DRY	DRY	DRY	---	---		22	22	22	22		
	11/10/1991	NS	DRY	DRY	DRY	DRY	---	---	24	12, 22	12, 22	22	22		
	2/22/1992	---	DRY	DRY	DRY	---	---	---		12	12	24			
	2/23/1992	6.40	---	---	---	NS	---	---	24				24		
	4/11/1992	---	DRY	DRY	DRY	---	---	---		12	12	24			
	4/12/1992	6.00	---	---	---	---	---	---	24						
	6/12/1992	---	DRY	DRY	DRY	---	---	---		12	12	24			
	6/14/1992	6.30	---	---	---	---	---	---	24						
	8/8/1992	---	DRY	---	DRY	---	---	---		12		24			
	8/9/1992	NS	---	---	---	---	---	---	24						
	10/9/1992	---	DRY	---	---	---	---	---		12					
	10/11/1992	6.20	---	---	---	---	---	---	24						
	2/21/1993	7.80	DRY	DRY	---	---	---	---	24	11	11				
	4/25/1993	5.80	DRY	DRY	---	---	---	---	24	11	11				
	6/6/1993	6.40	DRY	DRY	---	---	---	---	24	11	11				
	8/8/1993	5.90	DRY	DRY	---	---	---	---	24	11	11				
	10/8/1993	NS	DRY	DRY	---	---	---	---	24	11	11				
	12/12/1993	5.50	DRY	DRY	---	---	---	---	24	11	11				
	2/13/1994	6.30	DRY	DRY	---	---	---	---	24	24	24				
	4/17/1994	6.20	DRY	DRY	---	---	---	---	24	24	24				
	6/12/1994	6.40	DRY	DRY	---	---	---	---	24	24	24				
	8/28/1994	NS	DRY	DRY	---	---	---	---	24	24	24				
	10/30/1994	NS	DRY	DRY	---	---	---	---	24	24	24				
	1/29/1995	6.90	NS	NS	---	---	---	---	24	15	15				
	3/31/1995	---	0.01	< 0.002	---	---	---	---		15	15				
	5/21/1995	6.20	0.01	0.004	---	---	---	---	24	15	15				
	7/30/1995	---	NS	NS	---	---	---	---		15	15				
	9/24/1995	NS	NS	NS	---	---	---	---	24	15	15				
	11/19/1995	NS	NS	NS	---	---	---	---	24	15	15				
	1/27/1996	NS	NS	NS	---	---	---	---	24	14	14				
	3/31/1996	NS	DRY	DRY	---	---	---	---	24	14	14				
	5/19/1996	NS	DRY	NS	---	---	---	---	24	24	24				
	7/21/1996	NS	DRY	DRY	---	---	---	---	24	24	24				
	9/8/1996	NS	NS	NS	---	---	---	---	24	14	14				
	11/10/1996	NS	NS	NS	---	---	---	---	24	14	14				
	1/25/1997	NS	NS	NS	---	---	---	---	24	13	13				
	1/27/1997	---	DRY	DRY	---	---	---	---		24	24				
	3/15/1997	6.60	---	---	---	---	---	---	24						



**Table A17-2**  
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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	3/16/1997	---	0.016	< 0.002	---	---	---	---		13	13				
	5/18/1997	6.60	0.024	0.008	---	---	---	---	24	13	13				
	8/3/1997	NS	NS	NS	---	---	---	---	24	13	13				
	9/28/1997	NS	NS	NS	---	---	---	---	24	13	13				
	11/16/1997	NS	NS	NS	---	---	---	---	24	13	13				
	3/29/1998	7.13	0.009	<0.002	---	---	---	---	17	17	17				
	5/17/1998	7.13	NS	NS	---	---	---	---	17	17	17				
	7/26/1998	NS	NS	NS	---	---	---	---	17	17	17				
	9/27/1998	DRY	DRY	DRY	---	---	---	---	17	17	17				
	11/22/1998	5.55	0.025	0.0064	---	---	---	---	17	17	17				
	5/24/1999	4.13	NS	NS	---	---	---	---	18	16, 18	16, 18				
	7/29/1999	4.10	NS	NS	---	---	---	---	18	16, 18	16, 18				
	10/3/1999	3.10	NS	NS	---	---	---	---	18	16, 18	16, 18				
	11/14/1999	3.96	---	---	---	---	---	---	18	18	18				
	1/16/2000	DRY	DRY	DRY	---	---	---	---	19	19	19				
	4/9/2000	5.86	0.056	< 0.010	---	---	---	---	24	24	24				
	7/30/2000	NS	DRY	NS	---	---	---	---	24	24	24				
	3/23/2001	3.81	< 0.010	0.02	---	---	---	---	20	20	20				
	7/1/2001	4.30	---	---	---	---	---	---	20	20	20				
	8/12/2001	4.00	---	---	---	---	---	---	20	20	20				
	11/4/2001	3.90	---	---	---	---	---	---	20	20	20				
	3/8/2002	DRY	DRY	DRY	---	---	---	---	21	21	21				
	6/30/2002	DRY	DRY	DRY	---	---	---	---	21	21	21				
	8/18/2002	NS	DRY	NS	---	---	---	---	24	24	24				
	11/17/2002	NS	DRY	NS	---	---	---	---	24	24	24				
	3/27/2003	NS	DRY	NS	---	---	---	---	24	24	24				
	6/26/2003	NS	DRY	NS	---	---	---	---	24	24	24				
	7/18/2003	NS	DRY	DRY	---	---	---	---	24	24	24				
	12/22/2003	NS	DRY	DRY	---	---	---	---	24	24	24				
	3/31/2004	6.61	0.034	< 0.006	---	---	---	---	24	24	24				
	3/20/2005	NS	DRY	NS	---	---	---	---	24	24	24				
	11/22/2005	NS	DRY	DRY	---	---	---	---	24	24	24				
<b>B-5</b>	5/20/1983	7.27	< 0.01	---	0.007	---	0.002	214	1	1,3		1,3		1	1
	9/16/1983	---	< 0.01	---	< 0.01	---	---	---		2,3		2,3			
	5/22/1984	6.70	< 0.01	---	0.03	---	< 0.01	874	5	3,5		3,5		5	5
	12/20/1984	6.80	0.02	---	0.01	---	< 0.01	464	6	3,6		3,6		6	6
	7/23/1985	---	< 0.01	---	< 0.01	---	< 0.01	640		24		24		24	24
	4/25/1986	---	0.03	---	---	---	---	---		3					
	1/26/1987	---	0.14	---	< 0.01	---	---	---		24		24			
	8/17/1987	---	< 0.05	< 0.05	< 0.01	< 0.01	---	---		3	4	3	4		
	12/16/1987	---	< 0.01	---	< 0.01	---	---	---		3		24			
	7/8/1988	---	< 0.05	< 0.1	< 0.05	---	---	---		3	24	24			
	12/19/1988	---	< 0.05	---	---	< 0.05	---	---		24			24		
	1/31/1989	---	0.01	< 0.005	0.02	0.01	---	---		9	9	9	9		
	2/1/1989	---	0.03	< 0.02	< 0.01	< 0.01	---	---		8	8	8	8		



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	7/18/1989	---	< 0.005	< 0.005	< 0.01	< 0.01	---	---		24	24	24	24		
	2/8/1990	---	0.042	< 0.005	< 0.01	< 0.01	---	---		24	24	24	24		
	7/17/1990	6.80	0.001	0.001	< 0.005	< 0.005	---	---	10	10	10	10	10		
	7/18/1990	NS	---	---	---	< 0.005	---	---	24				24		
	July 1990	6.80	0.001	0.001	< 0.005	< 0.005	---	---	23	23	23	23	23		
	9/26/1990	---	0.031	0.004	< 0.005	< 0.005	---	---		10, 12*	10, 12*	10	10		
	9/27/1990	---	0.001	0.001	< 0.005	< 0.005	---	---		24	24	24	24		
	Sept. 1990	7.1	0.031	0.004	< 0.005	< 0.005	---	---	23	23	23	23	23		
	12/5/1990	NS	---	---	---	---	---	---	24						
	12/6/1990	NS	---	---	---	---	---	---	24						
	12/12/1990	NS	---	---	---	---	---	---	24						
	12/13/1990	NS	NS	---	---	NS	---	---	24	24			24		
	12/20/1990	NS	---	NS	NS	NS	---	---	24				24		
	1/24/1991	7.10	0.01	< 0.001	< 0.005	< 0.005	---	---	24	12, 22	12, 22	22	22		
	1/25/1991	NS	0.01	---	< 0.005	< 0.005	---	---	24	24		24	24		
	Jan. 1991	---	0.01	0.01	< 0.005	< 0.005	---	---		23	23	23	23		
	3/7/1991	6.50	0.02	< 0.001	< 0.005	< 0.005	---	---	10	10, 12, 22	10, 12, 22	10, 22	10		
	3/8/1991	NS	0.02	---	---	---	---	---	24	24					
	3/9/1991	NS	---	---	NS	---	---	---	24			24			
	3/10/1991	NS	---	< 0.001	---	< 0.005	---	---	24		24		24		
	March 1991	6.5	0.02	< 0.001	< 0.005	< 0.005	---	---	23	23	23	23	23		
	6/29/1991	7.10	0.015	0.008	< 0.005	---	---	---		12, 22	12, 22	22			
	6/30/1991	---	---	---	< 0.005	< 0.005	---	---				24	24		
	8/23/1991	6.90	0.023	0.001	---	---	---	---	24	12	12				
	8/24/1991	---	0.023	0.001	< 0.005	< 0.005	---	---		22	22	22	24		
	11/10/1991	7.40	0.037	< 0.002	< 0.005	< 0.005	---	---	24	12, 22	12, 22	22	24		
	2/22/1992	---	0.03	< 0.002	---	---	---	---		12	12				
	2/23/1992	6.90	---	---	< 0.005	< 0.005	---	---	24			24	24		
	4/11/1992	---	0.003	< 0.002	---	---	---	---		12	12				
	4/12/1992	6.80	---	---	< 0.005	---	---	---	24			24			
	6/12/1992	---	0.004	< 0.002	---	---	---	---		12	12				
	6/14/1992	7.00	---	---	< 0.005	---	---	---	24			24			
	8/8/1992	---	< 0.002	---	---	---	---	---		12					
	8/9/1992	7.20	---	---	< 0.005	---	---	---	24			24			
	10/9/1992	---	< 0.002	---	---	---	---	---		12					
	10/11/1992	6.80	---	---	< 0.005	---	---	---	24			24			
	2/21/1993	6.90	0.008	0.003	---	---	---	---	24	11	11				
	4/25/1993	7.00	0.005	0.005	---	---	---	---	24	11	11				
	6/6/1993	6.30	0.013	0.004	---	---	---	---	24	11	11				
	8/8/1993	6.80	0.011	0.006	---	---	---	---	24	11	11				
	10/8/1993	6.90	0.014	< 0.002	---	---	---	---	24	11	11				
	12/12/1993	6.50	0.016	0.003	---	---	---	---	24	11	11				
	2/13/1994	7.30	0.01	< 0.002	---	---	---	---	24	24	24				
	4/17/1994	7.80	0.016	0.004	---	---	---	---	24	24	24				
	6/12/1994	6.70	0.027	0.003	---	---	---	---	24	24	24				



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	8/28/1994	6.70	0.015	<0.002	---	---	---	---	24	24	24				
	10/30/1994	6.70	0.01	0.004	---	---	---	---	24	24	24				
	1/29/1995	7.00	0.003	<0.002	---	---	---	---	24	15	15				
	3/31/1995	---	0.005	<0.003	---	---	---	---		15	15				
	5/21/1995	6.70	0.004	<0.002	---	---	---	---	24	15	15				
	7/30/1995	---	0.007	0.006	---	---	---	---		15	15				
	9/24/1995	6.20	<0.002	0.008	---	---	---	---	24	15	15				
	11/19/1995	6.70	0.003	<0.002	---	---	---	---	24	15	15				
	1/27/1996	7.30	< 0.002	< 0.002	---	---	---	---	24	14	14				
	3/31/1996	7.10	0.003	< 0.002	---	---	---	---	24	14	14				
	5/19/1996	6.60	< 0.002	0.005	---	---	---	---	24	14	14				
	7/21/1996	6.40	< 0.002	< 0.002	---	---	---	---	24	14	14				
	9/8/1996	6.30	< 0.002	0.002	---	---	---	---	24	14	14				
	11/10/1996	6.90	< 0.002	0.002	---	---	---	---	24	14	14				
	1/25/1997	7.00	< 0.002	< 0.002	---	---	---	---	24	24	24				
	1/27/1997	---	< 0.002	< 0.002	---	---	---	---		13	13				
	3/15/1997	6.60	---	---	---	---	---	---	24						
	3/16/1997	---	< 0.002	< 0.002	---	---	---	---		13	13				
	5/18/1997	6.70	0.002	< 0.002	---	---	---	---	24	13	13				
	8/3/1997	6.74	0.005	0.002	---	---	---	---	24	13	13				
	9/28/1997	6.79	< 0.002	< 0.002	---	---	---	---	24	13	13				
	11/16/1997	6.65	0.005	< 0.002	---	---	---	---	24	13	13				
	3/29/1998	6.68	0.003	<0.002	---	---	---	---	17	17	17				
	5/17/1998	6.68	< 0.002	< 0.002	---	---	---	---	17	17	17				
	7/26/1998	6.71	0.006	< 0.002	---	---	---	---	17	17	17				
	9/27/1998	6.71	< 0.001	< 0.001	---	---	---	---	17	17	17				
	11/22/1998	6.42	0.049	0.0053	---	---	---	---	17	17	17				
	5/24/1999	5.99	0.011	< 0.005	---	---	---	---	18	16, 18	16, 18				
	7/29/1999	6.00	0.016	0.0068	---	---	---	---	18	16, 18	16, 18				
	10/3/1999	NS	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	11/14/1999	DRY	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	1/16/2000	DRY	< 0.010	< 0.010	---	---	---	---	19	19	19				
	4/9/2000	6.64	< 0.010	< 0.010	---	---	---	---	24	24	24				
	7/30/2000	6.53	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/23/2001	6.01	< 0.010	< 0.010	---	---	---	---	20	20	20				
	7/1/2001	6.07	< 0.010	< 0.010	---	---	---	---	20	20	20				
	8/12/2001	6.13	< 0.010	< 0.010	---	---	---	---	20	20	20				
	11/4/2001	DRY	< 0.010	< 0.010	---	---	---	---	20	20	20				
	3/8/2002	5.63	0.01	< 0.010	---	---	---	---	21	21	21				
	6/30/2002	5.93	---	---	---	---	---	---	21	21	21				
	8/18/2002	6.60	< 0.010	< 0.010	---	---	---	---	24	24	24				
	11/17/2002	6.90	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/27/2003	6.77	< 0.006	0.009	---	---	---	---	24	24	24				
	6/26/2003	6.81	< 0.006	< 0.006	---	---	---	---	24	24	24				
	7/18/2003	6.65	0.006	< 0.006	---	---	---	---	24	24	24				



**Table A17-2**  
**Historical Data - Groundwater Samples**  
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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	12/22/2003	6.77	< 0.006	< 0.006	---	---	---	---	24	24	24				
	3/31/2004	6.15	< 0.006	< 0.006	---	---	---	---	24	24	24				
	3/20/2005	6.43	< 0.006	< 0.006	---	---	---	---	24	24	24				
	11/22/2005	NS	NS	NS	---	---	---	---	24	24					
B-6	5/20/1983	7	0.07	---	0.006	---	0.004	1010	1	1,3		1,3		1	1
	9/16/1983	---	< 0.01	---	< 0.01	---	---	---		2,3		2,3			
	5/22/1984	6.50	0.02	---	< 0.01	---	0.01	1195	5	3,5		3,5		5	5
	12/20/1984	6.50	0.05	---	0.02	---	0.01	625	6	3,6		3,6		6	6
	7/23/1985	---	< 0.01	---	< 0.01	---	< 0.01	1421		24		24		24	24
	4/25/1986	---	0.07	---	---	---	---	---		3					
	1/26/1987	---	0.11	---	< 0.01	---	---	---		24		24			
	8/17/1987	---	< 0.05	< 0.05	< 0.01	< 0.01	---	---		3	4	3	4		
	12/16/1987	---	< 0.01	---	< 0.01	---	---	---		3		24			
	7/8/1988	---	< 0.05	< 0.1	< 0.05	---	---	---		3	24	24			
	12/19/1988	---	< 0.05	---	---	< 0.05	---	---		24			24		
	1/31/1989	---	< 0.005	< 0.005	< 0.01	< 0.01	---	---		9	9	9	9		
	2/1/1989	---	< 0.02	< 0.02	< 0.01	< 0.01	---	---		8	8	8	8		
	7/18/1989	---	< 0.005	< 0.005	< 0.01	< 0.01	---	---		24	24	24	24		
	2/8/1990	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/17/1990	NS	NS	NS	NS	---	---	---	24	24	24	24			
	7/18/1990	NS	---	---	---	NS	---	---	24				24		
	9/27/1990	---	NS	NS	NS	NS	---	---		24	24	24	24		
	12/5/1990	NS	---	---	---	---	---	---	24						
	12/6/1990	NS	---	---	---	---	---	---	24						
	12/12/1990	NS	---	---	---	---	---	---	24						
	12/13/1990	NS	NS	---	---	NS	---	---	24	24			24		
	12/20/1990	NS	---	NS	NS	NS	---	---	24		24	24	24		
	1/24/1991	NS	---	NS	---	---	---	---	24		24				
	1/25/1991	NS	NS	---	NS	NS	---	---	24	24		24	24		
	3/7/1991	NS	---	---	---	---	---	---	24						
	3/8/1991	NS	NS	---	---	---	---	---	24	24					
	3/9/1991	NS	---	---	NS	---	---	---	24			24			
	3/10/1991	NS	---	NS	---	NS	---	---	24		24		24		
	6/29/1991	NS	NS	NS	---	---	---	---	24	24	24				
	6/30/1991	---	---	---	NS	NS	---	---				24	24		
	8/23/1991	NS	NS	NS	---	---	---	---	24	24	24				
	8/25/1991	---	---	---	NS	NS	---	---				24	24		
	11/10/1991	NS	NS	NS	NS	NS	---	---	24	24	24	24	24		
	2/22/1992	---	NS	NS	---	---	---	---		24	24				
	2/23/1992	NS	---	---	NS	NS	---	---	24			24	24		
	4/11/1992	---	NS	NS	---	---	---	---		24	24				
	4/12/1992	NS	---	---	NS	---	---	---	24			24			
	6/12/1992	---	NS	NS	---	---	---	---		24	24				
	6/14/1992	NS	---	---	NS	---	---	---	24			24			
	8/8/1992	---	NS	---	---	---	---	---		24					



**Table A17-2**  
**Historical Data - Groundwater Samples**  
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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	8/9/1992	NS	---	---	NS	---	---	---	24			24			
	10/9/1992	---	NS	---	---	---	---	---		24					
	10/11/1992	NS	---	---	NS	---	---	---	24			24			
	2/21/1993	NS	NS	NS	---	---	---	---	24	24	24				
	4/25/1993	NS	NS	NS	---	---	---	---	24	24	24				
	6/6/1993	NS	NS	NS	---	---	---	---	24	24	24				
	8/8/1993	NS	NS	NS	---	---	---	---	24	24	24				
	10/10/1993	NS	NS	NS	---	---	---	---	24	24	24				
	12/12/1993	NS	NS	NS	---	---	---	---	24	24	24				
	2/13/1994	NS	NS	NS	---	---	---	---	24	24	24				
	4/17/1994	NS	NS	NS	---	---	---	---	24	24	24				
	6/12/1994	NS	NS	NS	---	---	---	---	24	24	24				
	8/28/1994	NS	NS	NS	---	---	---	---	24	24	24				
	10/30/1994	NS	NS	NS	---	---	---	---	24	24	24				
	1/29/1995	NS	NS	NS	---	---	---	---	24	24	24				
	5/21/1995	NS	NS	NS	---	---	---	---	24	24	24				
	7/30/1995	---	NS	NS	---	---	---	---		24	24				
	9/24/1995	NS	NS	NS	---	---	---	---	24	24	24				
	11/19/1995	NS	NS	NS	---	---	---	---	24	24	24				
	1/27/1996	NS	NS	NS	---	---	---	---	24	24	24				
	3/31/1996	NS	NS	NS	---	---	---	---	24	24	24				
	5/19/1996	NS	NS	NS	---	---	---	---	24	24	24				
	7/21/1996	NS	NS	NS	---	---	---	---	24	24	24				
	9/8/1996	NS	NS	NS	---	---	---	---	24	24	24				
	11/10/1996	NS	NS	NS	---	---	---	---	24	24	24				
	1/25/1997	NS	---	---	---	---	---	---	24						
	1/27/1997	---	NS	NS	---	---	---	---		24	24				
	3/15/1997	NS	---	---	---	---	---	---	24						
	3/16/1997	---	NS	NS	---	---	---	---		24	24				
	5/18/1997	NS	NS	NS	---	---	---	---	24	24	24				
	8/3/1997	NS	NS	NS	---	---	---	---	24	24	24				
	9/28/1997	NS	NS	NS	---	---	---	---	24	24	24				
	11/16/1997	NS	NS	NS	---	---	---	---	24	24	24				
	3/29/1998	NS	NS	NS	---	---	---	---	24	24	24				
	5/17/1998	NS	< 0.002	NS	---	---	---	---	24	24	24				
	7/26/1998	NS	NS	NS	---	---	---	---	24	24	24				
	11/22/1998	NS	NS	NS	---	---	---	---	24	24	24				
	5/24/1999	NS	NS	NS	---	---	---	---	24	24	24				
	7/29/1999	NS	NS	NS	---	---	---	---	24	24	24				
	10/3/1999	NS	NS	NS	---	---	---	---	24	24	24				
	11/14/1999	NS	NS	NS	---	---	---	---	24	24	24				
	1/16/2000	NS	NS	NS	---	---	---	---	24	24	24				
	4/9/2000	NS	NS	NS	---	---	---	---	24	24	24				
	7/30/2000	NS	NS	NS	---	---	---	---	24	24	24				
	3/23/2001	NS	NS	NS	---	---	---	---	24	24	24				



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	7/1/2001	NS	NS	NS	---	---	---	---	24	24	24				
	8/12/2001	NS	NS	NS	---	---	---	---	24	24	24				
	11/4/2001	NS	NS	NS	---	---	---	---	24	24	24				
	3/8/2002	NS	NS	NS	---	---	---	---	24	24	24				
	6/30/2002	NS	NS	NS	---	---	---	---	24	24	24				
	8/18/2002	NS	NS	NS	---	---	---	---	24	24	24				
	11/17/2002	NS	NS	NS	---	---	---	---	24	24	24				
	3/27/2003	NS	NS	NS	---	---	---	---	24	24	24				
	6/26/2003	NS	NS	NS	---	---	---	---	24	24	24				
	7/18/2003	NS	NS	NS	---	---	---	---	24	24	24				
	12/22/2003	NS	NS	NS	---	---	---	---	24	24	24				
	3/31/2004	NS	NS	NS	---	---	---	---	24	24	24				
	3/20/2005	NS	NS	NS	---	---	---	---	24	24	24				
	11/22/2005	NS	NS	NS	---	---	---	---	24	24	24				
<b>B-7</b>	5/20/1983	7.48	< 0.01	---	0.004	---	0.002	906	1	1,3		1,3		1	1
	9/16/1983	---	< 0.01	---	< 0.01	---	---	---		2,3		2,3			
	5/22/1984	7.30	< 0.01	---	< 0.01	---	< 0.01	675	5	3,5		3,5		5	5
	12/20/1984	7.10	< 0.01	---	< 0.01	---	< 0.01	412	6	3,6		3,6		6	6
	7/23/1985	---	< 0.01	---	< 0.01	---	< 0.01	262		24		24		24	24
	4/25/1986	---	0.02	---	---	---	---	---		3					
	1/26/1987	---	0.06	---	< 0.01	---	---	---		24		24			
	8/17/1987	---	< 0.05	< 0.05	< 0.01	< 0.01	---	---		3	4	3	4		
	12/16/1987	---	< 0.01	---	< 0.01	---	---	---		3		24			
	7/8/1988	---	< 0.05	< 0.1	< 0.05	---	---	---		3	24	24			
	12/19/1988	---	< 0.05	---	---	< 0.05	---	---		24			24		
	1/31/1989	---	< 0.005	< 0.005	< 0.01	< 0.01	---	---		9	9	9	9		
	2/1/1989	---	< 0.02	< 0.02	< 0.01	< 0.01	---	---		8	8	8	8		
	7/18/1989	---	< 0.005	< 0.005	< 0.01	< 0.01	---	---		24	24	24	24		
	2/8/1990	---	< 0.005	< 0.005	0.04	< 0.01	---	---		24	24	24	24		
	7/17/1990	NS	0.018	< 0.001	< 0.005	< 0.005	---	---	10	10	10	10	10		
	7/18/1990	7.00	---	---	---	< 0.005	---	---	24				24		
	July 1990	7.00	0.018	0.001	< 0.005	< 0.005	---	---	23	23	23	23	23		
	9/21/1990	---	0.055	0.003	< 0.005	< 0.005	---	---		10, 12*	10, 12*	10	10		
	9/27/1990	---	0.018	0.001	< 0.005	< 0.005	---	---		24	24	24	24		
	Sept. 1990	7.1	0.065	0.003	< 0.005	< 0.005	---	---	23	23	23	23	23		
	12/5/1990	NS	---	---	---	---	---	---	24						
	12/6/1990	NS	---	0.002	---	< 0.005	---	---	24		10		10		
	12/12/1990	NS	0.005	0.002	---	---	---	---	24	12	12				
	12/13/1990	7.10	0.005	0.002	< 0.005	< 0.005	---	---	24	22	22	22	22		
	12/20/1990	NS	---	0.002	< 0.005	NS	---	---	24		24	24	24		
	1/24/1991	NS	---	NS	---	---	---	---	24		24				
	1/25/1991	NS	NS	---	NS	NS	---	---	24	24		24	24		
	Jan. 1991	---	0.002	0.005	< 0.005	< 0.005	---	---		23	23	23	23		
	3/7/1991	NS	---	---	---	---	---	---	24						
	3/8/1991	NS	0.006	< 0.001	---	---	---	---	24	12	12				



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	3/9/1991	6.50	0.006	< 0.001	< 0.005	< 0.005	---	---	10	10, 22	10, 22	10, 22	10		
	3/10/1991	NS	---	< 0.001	---	< 0.005	---	---	24		24		24		
	March 1991	6.5	0.006	< 0.001	< 0.005	< 0.005	---	---	23	23	23	23	23		
	6/29/1991	7.10	0.014	< 0.001	---	---	---	---	24	12	12				
	6/30/1991	---	0.014	< 0.001	< 0.005	< 0.005	---	---		22	22	22	24		
	8/23/1991	NS	NS	NS	---	---	---	---	24	12	12				
	8/25/1991	---	---	---	< 0.005	NS	---	---				22	24		
	11/10/1991	NS	NS	NS	NS	NS	---	---	24	12, 22	12, 22	22	22		
	2/22/1992	---	NS	NS	---	---	---	---		12	12				
	2/23/1992	NS	---	---	NS	NS	---	---	24			24	24		
	4/11/1992	---	NS	NS	---	---	---	---		12	12				
	4/12/1992	NS	---	---	NS	---	---	---	24			24			
	6/12/1992	---	NS	NS	---	---	---	---		12	12				
	6/14/1992	NS	---	---	NS	---	---	---	24			24			
	8/8/1992	---	NS	0.005	---	---	---	---		12	24				
	8/9/1992	NS	---	---	NS	---	---	---	24			24			
	10/9/1992	---	NS	---	---	---	---	---		12					
	10/11/1992	NS	---	---	NS	---	---	---	24			24			
	2/21/1993	6.00	0.005	0.005	---	---	---	---	24	11	11				
	4/25/1993	6.40	0.008	0.003	---	---	---	---	24	11	11				
	6/6/1993	7.60	0.005	0.005	---	---	---	---	24	11	11				
	8/8/1993	6.10	0.008	0.007	---	---	---	---	24	11	11				
	10/8/1993	6.00	0.006	<0.002	---	---	---	---	24	11	11				
	12/12/1993	6.00	0.007	0.004	---	---	---	---	24	11	11				
	2/13/1994	6.30	0.007	0.004	---	---	---	---	24	24	24				
	4/17/1994	6.50	0.005	0.004	---	---	---	---	24	24	24				
	6/12/1994	5.60	0.011	0.004	---	---	---	---	24	24	24				
	8/28/1994	5.90	0.005	<0.002	---	---	---	---	24	24	24				
	10/30/1994	6.10	0.013	0.003	---	---	---	---	24	24	24				
	1/29/1995	6.20	0.028	0.002	---	---	---	---	24	15	15				
	3/31/1995	---	0.005	0.003	---	---	---	---		15	15				
	5/21/1995	6.10	<0.002	0.005	---	---	---	---	24	24	24				
	7/30/1995	---	<0.002	<0.002	---	---	---	---		15	15				
	9/24/1995	6.10	<0.002	0.012	---	---	---	---	24	15	15				
	11/19/1995	6.10	<0.002	<0.002	---	---	---	---	24	15	15				
	1/27/1996	6.40	< 0.002	< 0.002	---	---	---	---	24	14	14				
	3/31/1996	6.70	0.004	0.005	---	---	---	---	24	14	14				
	5/19/1996	6.10	< 0.002	0.004	---	---	---	---	24	14	14				
	7/21/1996	5.60	< 0.002	0.003	---	---	---	---	24	14	14				
	9/8/1996	6.70	0.003	< 0.002	---	---	---	---	24	14	14				
	11/10/1996	6.50	0.004	0.004	---	---	---	---	24	14	14				
	1/25/1997	6.30	0.004	< 0.002	---	---	---	---	24	13	13				
	1/27/1997	---	0.004	< 0.002	---	---	---	---		24	24				
	3/15/1997	5.80	---	---	---	---	---	---	24						
	3/16/1997	---	< 0.002	< 0.002	---	---	---	---		13	13				



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	5/18/1997	5.80	0.004	0.003	---	---	---	---	24	13	13				
	8/3/1997	5.65	0.004	0.003	---	---	---	---	24	13	13				
	9/28/1997	5.71	< 0.002	0.003	---	---	---	---	24	13	13				
	11/16/1997	5.85	0.002	< 0.002	---	---	---	---	24	13	13				
	3/29/1998	6.05	<0.002	<0.002	---	---	---	---	17	17	17				
	5/17/1998	6.05	0.002	0.002	---	---	---	---	17	17	17				
	7/26/1998	5.76	<0.002	0.002	---	---	---	---	17	17	17				
	9/27/1998	5.64	< 0.001	< 0.001	---	---	---	---	17	17	17				
	11/22/1998	5.67	0.0054	0.0053	---	---	---	---	17	17	17				
	5/24/1999	NS	0.013	0.01	---	---	---	---	18	16, 18	16, 18				
	7/29/1999	NS	0.012	0.012	---	---	---	---	18	16, 18	16, 18				
	10/3/1999	NS	0.015	< 0.010	---	---	---	---	18	16, 18	16, 18				
	11/14/1999	DRY	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	1/16/2000	DRY	< 0.010	< 0.010	---	---	---	---	19	19	19				
	4/9/2000	6.20	< 0.010	< 0.010	---	---	---	---	24	24	24				
	7/30/2000	5.85	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/23/2001	5.79	< 0.010	< 0.010	---	---	---	---	20	20	20				
	7/1/2001	NS	< 0.010	< 0.010	---	---	---	---	20	20	20				
	8/12/2001	DRY	< 0.010	< 0.010	---	---	---	---	20	20	20				
	11/4/2001	DRY	< 0.010	< 0.010	---	---	---	---	20	20	20				
	3/8/2002	DRY	< 0.010	< 0.010	---	---	---	---	21	21	21				
	6/30/2002	DRY	DRY	DRY	---	---	---	---	21	21	21				
	8/18/2002	5.57	< 0.010	< 0.010	---	---	---	---		24	24				
	11/17/2002	5.90	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/27/2003	5.91	< 0.006	0.012	---	---	---	---	24	24	24				
	6/26/2003	5.80	0.006	< 0.006	---	---	---	---	24	24	24				
	7/18/2003	5.75	< 0.006	< 0.006	---	---	---	---	24	24	24				
	12/22/2003	5.93	< 0.006	< 0.006	---	---	---	---	24	24	24				
	3/31/2004	6.07	< 0.006	0.008	---	---	---	---	24	24	24				
	3/20/2005	5.59	< 0.006	< 0.006	---	---	---	---	24	24	24				
	11/22/2005	5.67	< 0.006	< 0.006	---	---	---	---	24	24	24				
<b>B-8</b>	5/20/1983	---	NS	---	NS	---	---	---		24		24			
	9/16/1983	---	NS	---	NS	---	---	---		24		24			
	5/22/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	12/20/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	7/23/1985	---	NS	---	NS	---	NS	NS		24		24		24	24
	4/24/1986	---	NS	---	---	---	---	---		24					
	1/26/1987	---	NS	---	NS	---	---	---		24		24			
	8/17/1987	---	NS	NS	NS	NS	---	---		24	24	24			
	12/16/1987	---	< 0.01	---	< 0.01	---	---	---		3		24			
	7/8/1988	---	< 0.05	< 0.1	NS	---	---	---		3	24	24			
	12/19/1988	---	< 0.05	---	---	< 0.05	---	---					24		
	1/31/1989	---	< 0.005	< 0.005	< 0.01	< 0.01	---	---		9	9	9	9		
	2/1/1989	---	0.03	0.02	< 0.01	< 0.01	---	---		8	8	8	8		
	7/18/1989	---	< 0.005	< 0.005	< 0.01	< 0.01	---	---		24	24	24	24		



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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	2/8/1990	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/17/1990	NS	0.005	0.022	< 0.005	< 0.005	---	---	10	10	10	10	10		
	7/18/1990	3.50	---	---	---	< 0.005	---	---	24				24		
	July 1990	3.5	0.005	0.022	< 0.005	< 0.005	---	---	23	23	23	23	23		
	9/27/1990	---	0.012	0.005	< 0.005	< 0.005	---	---		10, 12*	10, 12*	10	10		
	Sept. 1990	6.1	0.012	0.005	< 0.005	< 0.005	---	---	23	23	23	23	23		
	12/5/1990	NS	0.004	0.004	---	---	---	---	24	12	12				
	12/6/1990	6.10	0.004	0.004	< 0.005	< 0.005	---	---	24	10, 22	10, 22	10, 22	10, 22		
	12/12/1990	NS	---	---	---	---	---	---	24						
	12/13/1990	NS	0.004	---	---	< 0.005	---	---	24	24			24		
	12/20/1990	NS	---	0.004	< 0.005	NS	---	---	24		24	24	24		
	1/24/1991	NS	---	NS	---	---	---	---	24		24				
	1/25/1991	NS	NS	---	NS	NS	---	---	24	24		24	24		
	Jan. 1991	---	0.004	0.004	< 0.005	< 0.005	---	---		23	23	23	23		
	3/7/1991	NS	0.004	0.001	---	---	---	---	24	12	12				
	3/8/1991	6.40	0.004	0.001	< 0.005	< 0.005	---	---	10	10, 22	10, 22	10, 22	10		
	3/9/1991	NS	---	---	< 0.005	---	---	---	24			24			
	3/10/1991	NS	---	0.001	---	< 0.005	---	---	24				24		
	March 1991	6.4	0.004	0.001	< 0.005	< 0.005	---	---	23	23	23	23	23		
	6/29/1991	6.70	0.002	< 0.001	---	---	---	---	24	12	12				
	6/30/1991	---	0.002	< 0.001	< 0.005	< 0.005	---	---		22	22	22	24		
	8/23/1991	4.80	0.001	< 0.001	---	---	---	---	24	12	12				
	8/25/1991	---	0.001	< 0.001	< 0.005	< 0.005	---	---		22	22	22	24		
	11/10/1991	6.20	0.007	< 0.002	< 0.005	< 0.005	---	---	24	12, 22	12, 22	22	24		
	2/22/1992	---	0.006	< 0.002	---	---	---	---		12	12				
	2/23/1992	6.30	---	---	< 0.005	< 0.005	---	---	24			24	24		
	4/11/1992	---	< 0.002	< 0.002	---	---	---	---		12	12				
	4/12/1992	6.00	---	---	< 0.005	---	---	---	24			24			
	6/12/1992	---	0.004	< 0.002	---	---	---	---		12	12				
	6/14/1992	6.10	---	---	< 0.005	---	---	---	24			24			
	8/8/1992	---	0.003	---	---	---	---	---		12					
	8/9/1992	6.00	---	---	< 0.005	---	---	---	24			24			
	10/9/1992	---	< 0.002	---	---	---	---	---		12					
	10/11/1992	5.60	---	---	< 0.005	---	---	---	24			24			
	2/21/1993	6.50	0.011	0.008	---	---	---	---	24	11	11				
	4/25/1993	6.90	0.004	< 0.002	---	---	---	---	24	11	11				
	6/6/1993	6.60	0.007	0.003	---	---	---	---	24	11	11				
	8/8/1993	6.00	0.009	0.004	---	---	---	---	24	11	11				
	10/8/1993	6.50	0.004	< 0.002	---	---	---	---	24	11	11				
	12/12/1993	7.00	0.009	0.009	---	---	---	---	24	11	11				
	2/13/1994	8.00	0.011	0.004	---	---	---	---	24	24	24				
	4/17/1994	NS	DRY	DRY	---	---	---	---	24	24	24				
	6/12/1994	NS	DRY	DRY	---	---	---	---	24	24	24				
	8/28/1994	NS	DRY	DRY	---	---	---	---	24	24	24				
	10/30/1994	NS	DRY	DRY	---	---	---	---	24	24	24				



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**Historical Data - Groundwater Samples**  
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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	1/29/1995	NS	NS	NS	---	---	---	---	24	15	15				
	3/31/1995	---	NS	NS	---	---	---	---		15	15				
	5/21/1995	NS	NS	NS	---	---	---	---	24	15	15				
	7/30/1995	---	NS	NS	---	---	---	---		15	15				
	9/24/1995	NS	NS	NS	---	---	---	---	24	15	15				
	11/19/1995	NS	NS	NS	---	---	---	---	24	15	15				
	1/27/1996	NS	NS	NS	---	---	---	---	24	14	14				
	3/31/1996	NS	NS	NS	---	---	---	---	24	14	14				
	5/19/1996	5.10	0.004	0.006	---	---	---	---	24	14	14				
	7/21/1996	4.10	0.005	0.003	---	---	---	---	24	14	14				
	9/8/1996	NS	NS	NS	---	---	---	---	24	14	14				
	11/10/1996	NS	NS	NS	---	---	---	---	24	14	14				
	1/25/1997	NS	NS	NS	---	---	---	---	24	13	13				
	1/27/1997	---	NS	NS	---	---	---	---		24	24				
	3/15/1997	NS	---	---	---	---	---	---	24						
	3/16/1997	---	NS	NS	---	---	---	---		13	13				
	5/18/1997	6.70	NS	NS	---	---	---	---	24	13	13				
	8/3/1997	6.49	0.003	0.002	---	---	---	---	24	13	13				
	9/28/1997	NS	NS	NS	---	---	---	---	24	13	13				
	11/9/1997	5.96	0.003	0.003	---	---	---	---	24	13	13				
	3/29/1998	6.51	<0.002	<0.002	---	---	---	---	17	17	17				
	5/17/1998	6.51	< 0.002	< 0.002	---	---	---	---	17	17	17				
	7/26/1998	NS	NS	NS	---	---	---	---	17	17	17				
	9/27/1998	NS	NS	NS	---	---	---	---	17	17	17				
	11/22/1998	NS	NS	NS	---	---	---	---	17	17	17				
	5/24/1999	6.65	0.0094	0.0061	---	---	---	---	18	16, 18	16, 18				
	7/29/1999	6.60	0.01	0.018	---	---	---	---	18	16, 18	16, 18				
	10/3/1999	6.60	NS	NS	---	---	---	---	18	16, 18	16, 18				
	11/14/1999	6.61	---	---	---	---	---	---	18	18	18				
	1/16/2000	6.60	---	---	---	---	---	---	19	19	19				
	4/9/2000	NS	NS	NS	---	---	---	---	24	24	24				
	7/30/2000	NS	NS	NS	---	---	---	---	24	24	24				
	3/23/2001	6.94	---	---	---	---	---	---	20	20	20				
	7/1/2001	6.63	---	---	---	---	---	---	20	20	20				
	8/12/2001	6.69	---	---	---	---	---	---	20	20	20				
	11/4/2001	6.60	---	---	---	---	---	---	20	20	20				
	3/8/2002	6.73	---	---	---	---	---	---	21	21	21				
	6/30/2002	6.51	---	---	---	---	---	---	21	21	21				
	8/18/2002	NS	NS	NS	---	---	---	---	24	24	24				
	11/17/2002	NS	NS	NS	---	---	---	---	24	24	24				
	3/27/2003	NS	NS	NS	---	---	---	---	24	24	24				
	6/26/2003	NS	NS	NS	---	---	---	---	24	24	24				
	7/18/2003	NS	NS	NS	---	---	---	---	24	24	24				
	12/22/2003	NS	NS	NS	---	---	---	---	24	24	24				
	3/31/2004	NS	NS	NS	---	---	---	---	24	24	24				



**Table A17-2**  
**Historical Data - Groundwater Samples**  
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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	3/20/2005	NS	NS	NS	---	---	---	---	24	24	24				
	11/22/2005	NS	NS	NS	---	---	---	---	24	24	24				
<b>B-9</b>	5/20/1983	---	NS	---	NS	---	---	---		24		24			
	9/16/1983	---	NS	---	NS	---	---	---		24		24			
	5/22/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	12/20/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	7/23/1985	---	NS	---	NS	---	NS	NS		24		24		24	24
	4/24/1986	---	NS	---	---	---	---	---		24					
	1/26/1987	---	NS	---	NS	---	---	---		24		24			
	8/17/1987	---	NS	NS	NS	NS	---	---		24	24	24	24		
	12/16/1987	---	< 0.01	---	< 0.01	---	---	---		3		24			
	7/8/1988	---	< 0.05	< 0.1	NS	---	---	---		3	24	24			
	12/19/1988	---	< 0.05	---	---	< 0.05	---	---		24			24		
	1/31/1989	---	< 0.005	< 0.005	< 0.01	< 0.01	---	---		9	9	9	9		
	2/1/1989	---	< 0.02	< 0.02	< 0.01	< 0.01	---	---		8	8	8	8		
	7/18/1989	---	< 0.005	< 0.005	< 0.01	< 0.01	---	---		24	24	24	24		
	1/24/1990	---	0.007	0.002	---	---	---	---		12	12				
	2/8/1990	---	0.039	< 0.005	0.04	< 0.01	---	---		24	24	24	24		
	7/17/1990	NS	0.002	< 0.001	< 0.005	< 0.005	---	---	10	10	10	10	10		
	7/18/1990	7.20	---	---	---	< 0.005	---	---	24				24		
	July 1990	7.2	0.002	0.001	< 0.005	< 0.005	---	---	23	23	23	23	23		
	9/27/1990	---	0.002	NS	< 0.005	< 0.005	---	---		24	24	24	24		
	Sept. 1990	7.8	0.011	0.011	< 0.005	< 0.005	---	---	23	23	23	23	23		
	10/1/1990	---	0.002	0.001						12	12				
	12/5/1990	NS	---	---	---	---	---	---	24						
	12/6/1990	NS	---	---	---	---	---	---	24						
	12/12/1990	NS	---	---	---	---	---	---	24						
	12/13/1990	NS	NS	---	---	NS	---	---	24	24			24		
	12/20/1990	NS	---	0.001	NS	NS	---	---	24		24	24	24		
	1/25/1991	7.80	0.007	0.002	< 0.005	< 0.005	---	---	24	22	22	22	22		
	Jan. 1991	---	0.007	0.002	< 0.005	< 0.005	---	---		23	23	23	23		
	3/7/1991	NS	---	---	---	---	---	---	24						
	3/8/1991	7.10	0.021	< 0.001	< 0.005	< 0.005	---	---	10	10, 22	10, 22	10, 22	10		
	3/9/1991	NS	0.021	< 0.001	< 0.005	---	---	---	24	12	12				
	3/10/1991	NS	---	< 0.001	---	< 0.005	---	---	24		24		24		
	March 1991	7.1	0.021	< 0.001	< 0.005	< 0.005	---	---	23	23	23	23	23		
	6/29/1991	8.10	0.027	0.01	< 0.005	---	---	---	24	12, 22	12, 22	22			
	6/30/1991	---	---	---	< 0.005	< 0.005	---	---					24		
	8/23/1991	6.30	0.007	0.003	---	---	---	---	24	12	12				
	8/25/1991	---	0.007	0.003	< 0.005	< 0.005	---	---		22	22	22	24		
	11/10/1991	7.30	0.015	< 0.002	< 0.005	< 0.005	---	---	24	12, 22	12, 22	22	24		
	2/22/1992	---	0.029	< 0.002	---	---	---	---		12	12				
	2/23/1992	7.60	---	---	< 0.005	< 0.005	---	---	24			24	24		
	4/11/1992	---	0.006	< 0.002	---	---	---	---		12	12				
	4/12/1992	7.20	---	---	< 0.005	---	---	---	24			24			



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	6/12/1992	---	< 0.002	< 0.002	---	---	---	---		12	12				
	6/14/1992	7.30	---	---	< 0.005	---	---	---	24			24			
	8/8/1992	---	0.002	0.005	---	---	---	---		12	24				
	8/9/1992	7.40	---	---	< 0.005	---	---	---	24			24			
	10/9/1992	---	< 0.002	---	---	---	---	---		12					
	10/11/1992	7.20	---	---	< 0.005	---	---	---	24			24			
	2/21/1993	7.40	0.008	0.005	---	---	---	---	24	11	11				
	4/25/1993	7.60	0.003	0.003	---	---	---	---	24	11	11				
	6/6/1993	6.60	0.016	0.011	---	---	---	---	24	11	11				
	8/8/1993	7.20	0.004	0.004	---	---	---	---	24	11	11				
	10/8/1993	7.70	0.005	<0.002	---	---	---	---	24	11	11				
	12/12/1993	7.40	0.01	0.01	---	---	---	---	24	11	11				
	2/13/1994	8.40	0.003	0.003	---	---	---	---	24	24	24				
	4/17/1994	8.50	0.009	<0.002	---	---	---	---	24	24	24				
	6/12/1994	7.30	0.013	0.004	---	---	---	---	24	24	24				
	8/28/1994	6.90	0.008	0.002	---	---	---	---	24	24	24				
	10/30/1994	7.10	0.008	0.003	---	---	---	---	24	24	24				
	1/29/1995	7.10	0.008	0.003	---	---	---	---	24	15	15				
	3/31/1995	---	0.007	0.002	---	---	---	---		15	15				
	5/21/1995	6.80	0.004	0.002	---	---	---	---	24	15	15				
	7/30/1995	---	0.014	0.005	---	---	---	---		15	15				
	9/24/1995	6.50	<0.002	<0.002	---	---	---	---	24	15	15				
	11/19/1995	7.00	<0.002	<0.002	---	---	---	---	24	15	15				
	1/27/1996	7.40	0.003	0.003	---	---	---	---	24	14	14				
	3/31/1996	7.40	0.003	< 0.002	---	---	---	---	24	14	14				
	5/19/1996	7.00	0.006	0.005	---	---	---	---	24	14	14				
	7/21/1996	6.50	< 0.002	< 0.002	---	---	---	---	24	14	14				
	9/8/1996	7.20	0.007	< 0.002	---	---	---	---	24	14	14				
	11/10/1996	7.30	< 0.002	< 0.002	---	---	---	---	24	14	14				
	1/25/1997	7.30	< 0.002	< 0.002	---	---	---	---	24	13	13				
	1/27/1997	---	< 0.002	< 0.002	---	---	---	---		24	24				
	3/15/1997	6.70	---	---	---	---	---	---	24						
	3/16/1997	---	0.005	< 0.002	---	---	---	---		13	13				
	5/18/1997	6.80	< 0.002	< 0.002	---	---	---	---	24	13	13				
	8/3/1997	6.92	0.003	0.004	---	---	---	---	24	13	13				
	9/28/1997	7.14	< 0.002	< 0.002	---	---	---	---	24	13	13				
	11/9/1997	7.05	0.006	0.004	---	---	---	---	24	13	13				
	3/29/1998	6.85	<0.002	<0.002	---	---	---	---	17	17	17				
	5/17/1998	6.85	< 0.002	< 0.002	---	---	---	---	17	17	17				
	7/26/1998	6.97	<0.002	< 0.002	---	---	---	---	17	17	17				
	9/27/1998	6.83	< 0.001	< 0.001	---	---	---	---	17	17	17				
	11/22/1998	6.75	<0.005	<0.005	---	---	---	---	17	17	17				
	5/24/1999	5.82	0.0097	< 0.005	---	---	---	---	18	16, 18	16, 18				
	7/29/1999	5.60	0.0073	0.012	---	---	---	---	18	16, 18	16, 18				
	10/3/1999	5.40	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				



**Table A17-2**  
**Historical Data - Groundwater Samples**  
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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	11/14/1999	5.86	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	1/16/2000	6.06	< 0.010	< 0.010	---	---	---	---	19	19	19				
	4/9/2000	6.85	< 0.010	< 0.010	---	---	---	---	24	24	24				
	7/30/2000	7.04	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/23/2001	6.13	< 0.010	< 0.010	---	---	---	---	20	20	20				
	7/1/2001	5.61	< 0.010	< 0.010	---	---	---	---	20	20	20				
	8/12/2001	5.60	< 0.010	< 0.010	---	---	---	---	20	20	20				
	11/4/2001	5.90	< 0.010	< 0.010	---	---	---	---	20	20	20				
	3/8/2002	5.94	< 0.010	< 0.010	---	---	---	---	21	21	21				
	6/30/2002	5.58	---	---	---	---	---	---	21	21	21				
	8/18/2002	6.82	< 0.010	< 0.010	---	---	---	---	24	24	24				
	11/17/2002	6.90	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/27/2003	6.88	< 0.006	0.006	---	---	---	---	24	24	24				
	6/26/2003	6.94	< 0.006	< 0.006	---	---	---	---	24	24	24				
	7/18/2003	7.08	< 0.006	< 0.006	---	---	---	---	24	24	24				
	12/22/2003	7.00	< 0.006	< 0.006	---	---	---	---	24	24	24				
	3/31/2004	6.88	< 0.006	< 0.006	---	---	---	---	24	24	24				
	3/20/2005	6.47	< 0.006	< 0.006	---	---	---	---	24	24	24				
	11/22/2005	6.69	0.01	< 0.006	---	---	---	---	24	24	24				
MW-10	5/20/1983	---	NS	---	NS	---	---	---		24		24			
	9/16/1983	---	NS	---	NS	---	---	---		24		24			
	5/22/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	12/20/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	7/23/1985	---	NS	---	NS	---	NS	NS		24		24		24	24
	4/24/1986	---	NS	---	---	---	---	---		24					
	1/26/1987	---	NS	---	NS	---	---	---		24		24			
	8/17/1987	---	NS	NS	NS	NS	---	---		24	24	24	24		
	12/16/1987	---	NS	---	NS	---	---	---		24		24			
	7/8/1988	---	NS	NS	NS	---	---	---		24	24	24			
	12/19/1988	---	NS	---	---	NS	---	---		24			24		
	1/31/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/1/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/18/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/8/1990	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/17/1990	NS	0.013	0.009	< 0.005	< 0.005	---	---	10	10	10	10	10		
	7/18/1990	3.40	---	---	---	< 0.005	---	---	24				24		
	July 1990	3.40	0.013	0.009	< 0.005	< 0.005	---	---	23	23	23	23	23		
	9/21/1990	---	0.031	0.009	< 0.005	< 0.005	---	---		10, 12*	10, 12	10	10		
	9/27/1990	---	0.013	0.009	< 0.005	< 0.005	---	---		24	24	24	24		
	Sept. 1990	6	0.031	0.009	< 0.005	< 0.005	---	---	23	23	23	23	23		
	10/1/1990	---	0.011	0.011	< 0.005	< 0.005	---	---		10	10	10	10		
	12/5/1990	NS	---	---	---	---	---	---	24						
	12/6/1990	NS	---	---	---	---	---	---	24						
	12/12/1990	NS	---	---	---	---	---	---	24						
	12/13/1990	NS	NS	---	---	NS	---	---	24				24		



**Table A17-2**  
**Historical Data - Groundwater Samples**  
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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	12/20/1990	NS	---	NS	NS	NS	---	---	24		24	24	24		
	1/24/1991	NS	0.008	0.004	---	---	---	---	24	12	12				
	1/25/1991	6.00	0.008	0.004	< 0.005	< 0.005	---	---	24	22	22	22	22		
	Jan. 1991	---	0.008	0.004	< 0.005	< 0.005	---	---		23	23	23	23		
	3/6/1991	---	0.007	0.004	---	---	---	---		12	12				
	3/7/1991	5.30	0.007	0.004	< 0.005	---	---	---	10	10, 22	10, 22	10, 22	10		
	3/8/1991	NS	0.007	---	---	---	---	---	24	24					
	3/9/1991	NS	---	---	< 0.005	---	---	---	24			24			
	3/10/1991	NS	---	0.004	---	< 0.005	---	---	24				24		
	March 1991	5.3	0.007	0.004	< 0.005	< 0.005	---	---	23	23	23	23	23		
	6/29/1991	4.90	0.014	0.008	< 0.005	---	---	---	24	12, 22	12, 22	22			
	6/30/1991	---	---	---	< 0.005	< 0.005	---	---				24	24		
	8/23/1991	4.40	0.004	0.001	---	---	---	---	24	12	12				
	8/25/1991	---	0.004	0.001	< 0.005	< 0.005	---	---		22	22	22	24		
	11/10/1991	5.00	0.023	0.012	< 0.005	< 0.005	---	---	24	12, 22	12, 22	22	24		
	2/22/1992	---	0.01	0.009	---	---	---	---		12	12				
	2/23/1992	5.30	---	---	< 0.005	< 0.005	---	---	24			24	24		
	4/11/1992	---	0.021	0.017	---	---	---	---		12	12				
	4/12/1992	5.00	---	---	< 0.005	---	---	---	24			24			
	6/12/1992	---	0.008	0.006	---	---	---	---		12	12				
	6/14/1992	5.00	---	---	< 0.005	---	---	---	24			24			
	8/8/1992	---	0.009	---	---	---	---	---		12					
	8/9/1992	5.00	---	---	< 0.005	---	---	---	24			24			
	10/9/1992	---	0.006	---	---	---	---	---		12					
	10/11/1992	4.60	---	---	< 0.005	---	---	---	24			24			
	2/21/1993	5.00	0.035	0.02	---	---	---	---	24	11	11				
	4/25/1993	5.20	0.065	0.008	---	---	---	---	24	11	11				
	6/6/1993	4.90	0.03	0.03	---	---	---	---	24	11	11				
	8/8/1993	4.60	0.021	0.017	---	---	---	---	24	11	11				
	10/8/1993	4.80	0.007	0.006	---	---	---	---	24	11	11				
	12/12/1993	4.90	0.017	0.01	---	---	---	---	24	11	11				
	2/13/1994	5.00	0.014	0.011	---	---	---	---	24	24	24				
	4/17/1994	4.60	0.012	0.01	---	---	---	---	24	24	24				
	6/12/1994	4.80	0.011	0.01	---	---	---	---	24	24	24				
	8/28/1994	4.70	0.007	0.007	---	---	---	---	24	24	24				
	10/30/1994	4.60	0.021	0.019	---	---	---	---	24	24	24				
	1/29/1995	6.20	0.012	0.008	---	---	---	---	24	15	15				
	3/31/1995	---	0.008	0.007	---	---	---	---		15	15				
	5/21/1995	5.60	0.013	0.006	---	---	---	---	24	15	15				
	7/30/1995	---	0.008	0.005	---	---	---	---		15	15				
	9/24/1995	4.50	0.011	0.026	---	---	---	---	24	15	15				
	11/19/1995	5.20	< 0.002	< 0.002	---	---	---	---	24	15	15				
	1/27/1996	5.50	< 0.002	0.008	---	---	---	---	24	14	14				
	3/31/1996	4.50	0.007	0.008	---	---	---	---	24	14	14				
	5/19/1996	NS	0.007	0.004	---	---	---	---	24	14	14				



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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	7/21/1996	4.00	0.007	0.006	---	---	---	---	24	14	14				
	9/8/1996	4.50	0.008	0.006	---	---	---	---	24	14	14				
	11/10/1996	6.40	0.017	0.019	---	---	---	---	24	14	14				
	1/25/1997	6.00	0.008	0.004	---	---	---	---	24	13	13				
	1/27/1997	---	0.008	< 0.002	---	---	---	---		24	24				
	3/15/1997	4.60	---	---	---	---	---	---	24						
	3/16/1997	---	0.009	0.008	---	---	---	---		13	13				
	5/18/1997	4.60	0.009	0.01	---	---	---	---	24	13	13				
	8/3/1997	4.54	0.009	0.007	---	---	---	---	24	13	13				
	9/28/1997	4.48	0.005	0.005	---	---	---	---	24	13	13				
	11/16/1997	4.32	0.009	0.003	---	---	---	---	24	13	13				
	3/29/1998	4.96	0.017	0.006	---	---	---	---	17	17	17				
	5/17/1998	4.96	0.008	0.004	---	---	---	---	17	17	17				
	7/26/1998	4.60	0.005	0.002	---	---	---	---	17	17	17				
	9/27/1998	4.69	< 0.001	< 0.001	---	---	---	---	17	17	17				
	11/22/1998	4.29	0.026	0.0099	---	---	---	---	17	17	17				
	5/24/1999	6.28	0.019	0.019	---	---	---	---	18	16, 18	16, 18				
	7/29/1999	6.20	0.017	0.0064	---	---	---	---	18	16, 18	16, 18				
	10/3/1999	NS	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	11/14/1999	DRY	0.018	< 0.010	---	---	---	---	18	16, 18	16, 18				
	1/16/2000	DRY	< 0.010	< 0.010	---	---	---	---	19	19	19				
	4/9/2000	5.05	0.012	< 0.010	---	---	---	---	24	24	24				
	7/30/2000	4.33	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/23/2001	NS	< 0.010	0.049	---	---	---	---	20	20	20				
	7/1/2001	NS	0.02	< 0.010	---	---	---	---	20	20	20				
	8/12/2001	NS	< 0.010	0.01	---	---	---	---	20	20	20				
	11/4/2001	NS	< 0.010	< 0.010	---	---	---	---	20	20	20				
	3/8/2002	NS	0.039	0.016	---	---	---	---	21	21	21				
	6/30/2002	NS	NS	NS	---	---	---	---	21	21	21				
	8/18/2002	4.97	0.034	< 0.010	---	---	---	---	24	24	24				
	11/17/2002	4.90	0.045	0.01	---	---	---	---	24	24	24				
	3/27/2003	5.23	0.013	0.014	---	---	---	---	24	24	24				
	6/26/2003	5.07	0.007	< 0.006	---	---	---	---	24	24	24				
	7/18/2003	4.99	0.009	< 0.006	---	---	---	---	24	24	24				
	12/22/2003	5.35	0.009	< 0.006	---	---	---	---	24	24	24				
	3/31/2004	5.22	0.023	0.006	---	---	---	---	24	24	24				
	3/20/2005	5.33	0.028	0.012	---	---	---	---	24	24	24				
	11/22/2005	5.40	0.01	< 0.006	---	---	---	---	24	24	24				
MW-11	5/20/1983	---	NS	---	NS	---	---	---		24					
	9/16/1983	---	NS	---	NS	---	---	---		24					
	5/22/1984	NS	NS	---	NS	---	NS	NS	24	24				24	24
	12/20/1984	NS	NS	---	NS	---	NS	NS	24	24				24	24
	7/23/1985	---	NS	---	NS	---	NS	NS		24				24	24
	4/24/1986	---	NS	---	---	---	---	---		24					
	1/26/1987	---	NS	---	NS	---	---	---		24					



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	8/17/1987	---	NS	NS	NS	NS	---	---		24	24		24		
	12/16/1987	---	NS	---	NS	---	---	---		24					
	7/8/1988	---	NS	NS	NS	---	---	---		24	24				
	12/19/1988	---	NS	---	---	NS	---	---		24			24		
	1/31/1989	---	NS	NS	NS	NS	---	---		24	24		24		
	2/1/1989	---	NS	NS	NS	NS	---	---		24	24		24		
	7/18/1989	---	NS	NS	NS	NS	---	---		24	24		24		
	2/8/1990	---	NS	NS	NS	NS	---	---		24	24		24		
	7/17/1990	6.60	0.01	< 0.001	< 0.005	< 0.005	---	---	10	10	10	10	10		
	7/18/1990	NS	---	---	---	< 0.005	---	---	24				24		
	July 1990	6.6	0.01	0.001	< 0.005	< 0.005	---	---	23	23	23	23	23		
	9/27/1990	---	0.007	0.002	< 0.005	< 0.005	---	---		10, 12*	10, 12*	10	10		
	Sept. 1990	7	0.007	0.002	< 0.005	< 0.005	---	---	23	23	23	23	23		
	12/5/1990	NS	---	---	---	---	---	---	24						
	12/6/1990	NS	---	---	---	---	---	---	24						
	12/12/1990	NS	---	---	---	---	---	---	24						
	12/13/1990	NS	NS	---	---	NS	---	---	24	24			24		
	12/20/1990	NS	---	NS	NS	NS	---	---	24		24	24	24		
	1/24/1991	NS	0.007	0.001	---	---	---	---	24	12	12				
	1/25/1991	7.00	0.007	0.001	< 0.005	< 0.005	---	---	24	22	22	22	22		
	Jan. 1991	---	0.007	0.001	< 0.005	< 0.005	---	---		23	23	23	23		
	3/7/1991	NS	---	---	---	---	---	---	24						
	3/8/1991	NS	0.015	< 0.001	---	---	---	---	24	12	12				
	3/9/1991	NS	---	---	< 0.005	---	---	---	24			24			
	3/10/1991	6.70	0.015	< 0.001	< 0.005	< 0.005	---	---	10	10, 22	10, 22	10, 22	10		
	March 1991	6.70	0.02	< 0.001	< 0.005	< 0.005	---	---	23	23	23	23	23		
	6/29/1991	6.60	0.029	0.002	---	---	---	---	24	12	12				
	6/30/1991	---	0.029	0.002	< 0.005	< 0.005	---	---		22	22	22	24		
	8/23/1991	6.70	0.003	< 0.001	---	---	---	---	24	12	12				
	8/25/1991	---	0.003	< 0.001	< 0.005	< 0.005	---	---		22	22	22	24		
	11/10/1991	6.90	0.009	< 0.002	< 0.005	< 0.005	---	---	24	12, 22	12, 22	22	24		
	2/22/1992	---	0.04	0.002	---	---	---	---		12	12				
	2/23/1992	7.00	---	---	< 0.005	< 0.005	---	---	24			24	24		
	4/11/1992	---	< 0.002	< 0.002	---	---	---	---		12	12				
	4/12/1992	6.90	---	---	< 0.005	---	---	---	24			24			
	6/12/1992	---	0.007	< 0.002	---	---	---	---		12	12				
	6/14/1992	7.00	---	---	< 0.005	---	---	---	24			24			
	8/8/1992	---	< 0.002	---	---	---	---	---		12					
	8/9/1992	7.40	---	---	< 0.005	---	---	---	24			24			
	10/9/1992	---	0.002	---	---	---	---	---		12					
	10/11/1992	7.30	---	---	< 0.005	---	---	---	24			24			
	2/21/1993	7.00	0.004	0.002	---	---	---	---	24	11	11				
	4/25/1993	7.00	0.004	< 0.002	---	---	---	---	24	11	11				
	6/6/1993	7.30	0.006	0.003	---	---	---	---	24	11	11				
	8/8/1993	9.30	0.008	0.004	---	---	---	---	24	11	11				



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	10/8/1993	6.50	0.003	0.002	---	---	---	---	24	11	11				
	12/12/1993	6.60	0.005	0.002	---	---	---	---	24	11	11				
	2/13/1994	7.00	0.006	0.006	---	---	---	---	24	24	24				
	4/17/1994	7.20	0.012	0.012	---	---	---	---	24	24	24				
	6/12/1994	7.20	0.01	0.002	---	---	---	---	24	24	24				
	8/28/1994	5.70	0.002	<0.002	---	---	---	---	24	24	24				
	10/30/1994	6.70	<0.002	<0.002	---	---	---	---	24	24	24				
	1/29/1995	6.80	<0.002	0.003	---	---	---	---	24	15	15				
	3/31/1995	---	<0.002	<0.002	---	---	---	---		15	15				
	5/21/1995	6.70	0.007	0.003	---	---	---	---	24	15	15				
	7/30/1995	---	0.007	<0.002	---	---	---	---		15	15				
	9/24/1995	5.80	<0.002	<0.002	---	---	---	---	24	15	15				
	11/19/1995	6.70	<0.002	<0.002	---	---	---	---	24	15	15				
	1/27/1996	6.50	0.013	< 0.002	---	---	---	---	24	14	14				
	3/31/1996	6.80	< 0.002	0.003	---	---	---	---	24	14	14				
	5/19/1996	6.40	0.002	0.008	---	---	---	---	24	14	14				
	7/21/1996	6.10	< 0.002	< 0.002	---	---	---	---	24	14	14				
	9/8/1996	6.60	< 0.002	0.003	---	---	---	---	24	14	14				
	11/10/1996	6.60	< 0.002	0.002	---	---	---	---	24	14	14				
	1/25/1997	7.50	< 0.002	< 0.002	---	---	---	---	24	13	13				
	1/27/1997	---	< 0.002	< 0.002	---	---	---	---		24	24				
	3/15/1997	6.50	---	---	---	---	---	---	24						
	3/16/1997	---	< 0.002	< 0.002	---	---	---	---		13	13				
	5/18/1997	NS	NS	NS	---	---	---	---	24	13	13				
	8/3/1997	6.62	0.002	< 0.002	---	---	---	---	24	13	13				
	9/28/1997	6.62	< 0.002	< 0.002	---	---	---	---	24	13	13				
	11/16/1997	6.29	< 0.002	< 0.002	---	---	---	---	24	13	13				
	3/29/1998	6.71	<0.002	<0.002	---	---	---	---	17	17	17				
	5/17/1998	6.71	< 0.002	< 0.002	---	---	---	---	17	17	17				
	7/26/1998	6.58	<0.002	<0.002	---	---	---	---	17	17	17				
	9/27/1998	6.23	< 0.001	< 0.001	---	---	---	---	17	17	17				
	11/22/1998	NS	NS	NS	---	---	---	---	17	17	17				
	5/24/1999	6.90	0.0082	< 0.005	---	---	---	---	18	16, 18	16, 18				
	7/29/1999	6.90	0.023	0.01	---	---	---	---	18	16, 18	16, 18				
	10/3/1999	6.10	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	11/14/1999	6.86	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	1/16/2000	6.92	< 0.010	< 0.010	---	---	---	---	19	19	19				
	4/9/2000	6.22	< 0.010	< 0.010	---	---	---	---	24	24	24				
	7/30/2000	6.21	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/23/2001	7.13	< 0.010	< 0.010	---	---	---	---	20	20	20				
	7/1/2001	6.87	< 0.010	< 0.010	---	---	---	---	20	20	20				
	8/12/2001	6.88	< 0.010	< 0.010	---	---	---	---	20	20	20				
	11/4/2001	6.10	< 0.010	< 0.010	---	---	---	---	20	20	20				
	3/8/2002	6.89	0.01	< 0.010	---	---	---	---	21	21	21				
	6/30/2002	6.87	---	---	---	---	---	---	21	21	21				



**Table A17-2**  
**Historical Data - Groundwater Samples**  
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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	8/18/2002	6.16	< 0.010	< 0.010	---	---	---	---	24	24	24				
	11/17/2002	6.10	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/27/2003	6.29	< 0.006	< 0.006	---	---	---	---	24	24	24				
	6/26/2003	6.40	< 0.006	< 0.006	---	---	---	---	24	24	24				
	7/18/2003	6.41	< 0.006	< 0.006	---	---	---	---	24	24	24				
	12/22/2003	6.33	< 0.006	< 0.006	---	---	---	---	24	24	24				
	3/31/2004	6.45	< 0.006	< 0.006	---	---	---	---	24	24	24				
	3/20/2005	NS	NS	NS	---	---	---	---	24	24	24				
	11/22/2005	6.01	< 0.006	< 0.006	---	---	---	---	24	24	24				
MW-12	5/20/1983	---	NS	---	NS	---	---	---		24		24			
	9/16/1983	---	NS	---	NS	---	---	---		24		24			
	5/22/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	12/20/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	7/23/1985	---	NS	---	NS	---	NS	NS		24		24		24	24
	4/24/1986	---	NS	---	---	---	---	---		24					
	1/26/1987	---	NS	---	NS	---	---	---		24		24			
	8/17/1987	---	NS	NS	NS	NS	---	---		24	24	24	24		
	12/16/1987	---	NS	---	NS	---	---	---		24		24			
	7/8/1988	---	NS	NS	NS	---	---	---		24	24	24			
	12/19/1988	---	NS	---	---	NS	---	---		24			24		
	1/31/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/1/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/18/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/8/1990	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/17/1990	3.90	0.048	0.013	0.04	< 0.005	---	---	10	10	10	10	10		
	7/18/1990	NS	---	---	---	< 0.005	---	---	24				24		
	July 1990	3.9	0.048	0.013	0.04	< 0.005	---	---	23	23	23	23	23		
	9/27/1990	---	0.05	0.017	< 0.005	< 0.005	---	---		10, 12*	10, 12*	10	10		
	Sept. 1990	6.9	0.05	0.017	< 0.005	< 0.005	---	---	23	23	23	23	23		
	12/5/1990	NS	0.003	0.003	---	---	---	---	24	12	12				
	12/6/1990	5.00	0.003	0.003	< 0.005	< 0.005	---	---	24	10, 22	22	10, 22	22		
	12/12/1990	NS	---	---	---	---	---	---	24						
	12/13/1990	NS	0.003	---	---	< 0.005	---	---	24	24			24		
	12/20/1990	NS	---	0.003	< 0.005	NS	---	---	24		24	24	24		
	1/24/1991	NS	---	NS	---	---	---	---	24		24				
	1/25/1991	NS	NS	---	NS	NS	---	---	24	24		24	24		
	Jan. 1991	---	0.003	0.003	< 0.005	< 0.005	---	---		23	23	23	23		
	3/7/1991	NS	0.011	0.006	---	---	---	---	24	12	12				
	3/8/1991	4.80	0.011	0.006	< 0.005	< 0.005	---	---	10	10, 22	10, 22	10, 22	10		
	3/9/1991	NS	---	---	< 0.005	---	---	---	24			24			
	3/10/1991	NS	---	0.006	---	< 0.005	---	---	24				24		
	March 1991	6.4	0.011	0.006	< 0.005	< 0.005	---	---	23	23	23	23	23		
	6/29/1991	3.90	0.025	0.025	---	---	---	---	24	12	12				
	6/30/1991	---	0.025	0.025	< 0.005	< 0.005	---	---		22	22	22	24		
	8/23/1991	4.70	0.004	0.002	---	---	---	---	24	12	12				



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	8/25/1991	---	0.004	0.002	< 0.005	< 0.005	---	---		22	22	22	24		
	11/10/1991	3.90	0.006	0.002	< 0.005	< 0.005	---	---	24	12, 22	12, 22	22	24		
	2/22/1992	---	0.053	< 0.002	---	---	---	---		12	12				
	2/23/1992	3.60	---	---	< 0.005	< 0.005	---	---	24			24	24		
	4/11/1992	---	< 0.002	0.002	---	---	---	---		12	12				
	4/12/1992	4.10	---	---	< 0.005	---	---	---	24			24			
	6/12/1992	---	0.004	0.005	---	---	---	---		12	12				
	6/14/1992	4.00	---	---	< 0.005	---	---	---	24			24			
	8/8/1992	---	0.002	---	---	---	---	---		12					
	8/9/1992	4.50	---	---	< 0.005	---	---	---	24			24			
	10/9/1992	---	0.005	---	---	---	---	---		12					
	10/11/1992	4.80	---	---	< 0.005	---	---	---	24			24			
	2/21/1993	5.00	0.002	< 0.002	---	---	---	---	24	11	11				
	4/25/1993	4.80	0.005	0.003	---	---	---	---	24	11	11				
	6/6/1993	5.10	0.008	0.006	---	---	---	---	24	11	11				
	8/8/1993	8.50	0.004	< 0.002	---	---	---	---	24	11	11				
	10/8/1993	4.00	0.005	0.005	---	---	---	---	24	11	11				
	12/12/1993	4.40	0.005	0.004	---	---	---	---	24	11	11				
	2/13/1994	5.20	0.011	0.008	---	---	---	---	24	24	24				
	4/17/1994	NS	0.03	0.03	---	---	---	---	24	24	24				
	6/12/1994	7.20	0.006	0.004	---	---	---	---	24	24	24				
	8/28/1994	5.30	< 0.002	< 0.002	---	---	---	---	24	24	24				
	10/30/1994	3.80	< 0.002	< 0.002	---	---	---	---	24	24	24				
	1/29/1995	4.40	0.004	0.003	---	---	---	---	24	15	15				
	3/31/1995	---	0.005	0.003	---	---	---	---		15	15				
	5/21/1995	3.30	0.008	0.005	---	---	---	---	24	15	15				
	7/30/1995	---	0.006	< 0.002	---	---	---	---		15	15				
	9/24/1995	3.80	0.004	0.003	---	---	---	---	24	15	15				
	11/19/1995	3.60	< 0.002	0.003	---	---	---	---	24	15	15				
	1/27/1996	4.20	0.003	0.003	---	---	---	---	24	14	14				
	3/31/1996	3.40	0.003	0.007	---	---	---	---	24	14	14				
	5/19/1996	3.10	0.007	0.007	---	---	---	---	24	14	14				
	7/21/1996	3.30	< 0.002	0.002	---	---	---	---	24	14	14				
	9/8/1996	4.30	0.003	0.002	---	---	---	---	24	14	14				
	11/10/1996	3.70	< 0.002	< 0.002	---	---	---	---	24	14	14				
	1/25/1997	3.50	0.003	< 0.002	---	---	---	---	24	13	13				
	1/27/1997	---	0.003	< 0.002	---	---	---	---		24	24				
	3/15/1997	3.60	---	---	---	---	---	---	24						
	3/16/1997	---	< 0.002	< 0.002	---	---	---	---		13	13				
	5/18/1997	3.80	0.004	0.003	---	---	---	---	24	13	13				
	8/3/1997	3.79	0.003	0.004	---	---	---	---	24	13	13				
	9/28/1997	3.73	< 0.002	< 0.002	---	---	---	---	24	13	13				
	11/16/1997	3.57	0.006	0.003	---	---	---	---	24	13	13				
	3/29/1998	3.72	< 0.002	< 0.002	---	---	---	---	17	17	17				
	5/17/1998	3.72	0.006	< 0.002	---	---	---	---	17	17	17				



**Table A17-2**  
**Historical Data - Groundwater Samples**  
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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	7/26/1998	3.78	<0.002	<0.002	---	---	---	---	17	17	17				
	9/27/1998	4.17	< 0.001	< 0.001	---	---	---	---	17	17	17				
	11/22/1998	3.58	<0.005	<0.005	---	---	---	---	17	17	17				
	5/24/1999	4.79	0.006	0.0062	---	---	---	---	18	16, 18	16, 18				
	7/29/1999	4.60	0.0053	0.0062	---	---	---	---	18	16, 18	16, 18				
	10/3/1999	4.20	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	11/14/1999	4.75	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	1/16/2000	4.67	< 0.010	< 0.010	---	---	---	---	19	19	19				
	4/9/2000	3.69	< 0.010	< 0.010	---	---	---	---	24	24	24				
	7/30/2000	3.80	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/23/2001	4.21	< 0.010	< 0.010	---	---	---	---	20	20	20				
	7/1/2001	5.18	< 0.010	< 0.010	---	---	---	---	20	20	20				
	8/12/2001	4.95	< 0.010	< 0.010	---	---	---	---	20	20	20				
	11/4/2001	5.00	< 0.010	< 0.010	---	---	---	---	20	20	20				
	3/8/2002	4.96	0.012	0.011	---	---	---	---	21	21	21				
	6/30/2002	5.04	---	---	---	---	---	---	21	21	21				
	8/18/2002	4.24	0.013	0.01	---	---	---	---	24	24	24				
	11/17/2002	4.40	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/27/2003	4.38	0.006	< 0.006	---	---	---	---	24	24	24				
	6/26/2003	4.70	0.006	< 0.006	---	---	---	---	24	24	24				
	7/18/2003	4.01	0.006	< 0.006	---	---	---	---	24	24	24				
	12/22/2003	4.51	0.006	< 0.006	---	---	---	---	24	24	24				
	3/31/2004	4.25	0.008	< 0.006	---	---	---	---	24	24	24				
	3/20/2005	6.34	< 0.006	< 0.006	---	---	---	---	24	24	24				
	11/22/2005	4.30	< 0.006	< 0.006	---	---	---	---	24	24	24				
MW-13	5/20/1983	---	NS	---	NS	---	---	---		24		24			
	9/16/1983	---	NS	---	NS	---	---	---		24		24			
	5/22/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	12/20/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	7/23/1985	---	NS	---	NS	---	NS	NS		24		24		24	24
	4/24/1986	---	NS	---	---	---	---	---		24					
	1/26/1987	---	NS	---	NS	---	---	---		24		24			
	8/17/1987	---	NS	NS	NS	NS	---	---		24	24	24	24		
	12/16/1987	---	NS	---	NS	---	---	---		24		24			
	7/8/1988	---	NS	NS	NS	---	---	---		24	24	24			
	12/19/1988	---	NS	---	---	NS	---	---		24			24		
	1/31/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/1/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/18/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/8/1990	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/17/1990	7.00	0.065	< 0.001	0.03	< 0.005	---	---	10	10	10	10	10		
	7/18/1990	NS	---	---	---	< 0.005	---	---	24					24	
	July 1990	7.00	0.07	0.00	0.03	< 0.005	---	---	23	23	23	23	23		
	9/25/1990	---	0.024	0.004	< 0.005	< 0.005	---	---		10, 12*	10, 12*	10	10		
	9/27/1990	---	0.065	0.001	< 0.005	< 0.005	---	---		24	24	24	24		



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	Sept. 1990	5	0.024	0.004	< 0.005	< 0.005	---	---	23	23	23	23	23		
	12/5/1990	NS	---	---	---	---	---	---	24						
	12/6/1990	NS	---	---	---	---	---	---	24						
	12/12/1990	NS	---	---	---	---	---	---	24						
	12/13/1990	NS	0.018	---	---	NS	---	---	24	24			24		
	12/20/1990	6.90	0.018	< 0.001	< 0.005	< 0.005	---	---	24	12, 22	12, 22	22	22		
	1/24/1991	NS	---	NS	---	---	---	---	24		24				
	1/25/1991	NS	NS	---	NS	NS	---	---	24			24	24		
	Jan. 1991	---	0.018	< 0.001	< 0.005	< 0.005	---	---		23	23	23	23		
	3/7/1991	6.40	0.035	0.001	< 0.005	< 0.005	---	---	10	10, 12, 22	10, 12, 22	10, 22	10		
	3/8/1991	NS	0.035	---	---	---	---	---	24	24					
	3/9/1991	NS	---	---	< 0.005	---	---	---	24			24			
	3/10/1991	NS	---	0.001	---	< 0.005	---	---	24		24		24		
	March 1991	4.80	0.04	0.00	< 0.005	< 0.005	---	---	23	23	23	23	23		
	6/29/1991	7.00	0.03	< 0.001	< 0.005	---	---	---	24	12, 22	12, 22	22			
	6/30/1991	---	---	---	< 0.005	< 0.005	---	---				24	24		
	8/23/1991	6.90	0.016	< 0.001	---	---	---	---	24	12	12				
	8/24/1991	---	0.016	< 0.001	< 0.005	< 0.005	---	---		22	22	22	24		
	11/10/1991	7.00	0.022	< 0.002	< 0.005	< 0.005	---	---	24	12, 22	12, 22*	22	24		
	2/22/1992	---	0.12	< 0.002	---	---	---	---		12	12				
	2/23/1992	6.70	---	---	< 0.005	< 0.005	---	---	24			24	24		
	4/11/1992	---	0.014	< 0.002	---	---	---	---		12	12				
	4/12/1992	6.70	---	---	< 0.005	---	---	---	24			24			
	6/12/1992	---	0.008	< 0.002	---	---	---	---		12	12				
	6/14/1992	6.70	---	---	< 0.005	---	---	---	24			24			
	8/8/1992	---	< 0.002	0.002	---	---	---	---		12	24				
	8/9/1992	7.20	---	---	< 0.005	---	---	---	24			24			
	10/9/1992	---	0.004	< 0.002	---	---	---	---		12	24				
	10/11/1992	6.80	---	---	< 0.005	---	---	---	24			24			
	2/21/1993	7.40	0.011	0.002	---	---	---	---	24	11	11				
	4/25/1993	6.60	0.003	< 0.002	---	---	---	---	24	11	11				
	6/6/1993	6.70	0.007	0.004	---	---	---	---	24	11	11				
	8/8/1993	7.70	0.005	< 0.002	---	---	---	---	24	11	11				
	10/8/1993	5.70	0.004	< 0.002	---	---	---	---	24	11	11				
	12/12/1993	5.30	0.01	< 0.002	---	---	---	---	24	11	11				
	2/13/1994	7.20	0.015	0.006	---	---	---	---	24	24	24				
	4/17/1994	7.30	0.025	0.004	---	---	---	---	24	24	24				
	6/12/1994	7.40	0.009	0.001	---	---	---	---	24	24	24				
	8/28/1994	5.80	0.003	< 0.002	---	---	---	---	24	24	24				
	10/30/1994	6.40	< 0.002	< 0.002	---	---	---	---	24	24	24				
	1/29/1995	6.70	0.005	< 0.002	---	---	---	---	24	15	15				
	3/31/1995	---	0.004	< 0.003	---	---	---	---		15	15				
	5/21/1995	6.70	0.007	0.005	---	---	---	---	24	15	15				
	7/30/1995	---	0.005	0.004	---	---	---	---		15	15				
	9/24/1995	5.70	< 0.002	0.004	---	---	---	---	24	15	15				



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	11/19/1995	6.50	<0.002	< 0.002	---	---	---	---	24	15	15				
	1/27/1996	6.80	< 0.002	< 0.002	---	---	---	---	24	14	14				
	3/31/1996	6.80	0.004	< 0.002	---	---	---	---	24	14	14				
	5/19/1996	6.70	NS	NS	---	---	---	---	24	24					
	7/21/1996	6.40	0.003	< 0.002	---	---	---	---	24	14	14				
	9/8/1996	6.70	< 0.002	< 0.002	---	---	---	---	24	14	14				
	11/10/1996	7.00	0.005	0.006	---	---	---	---	24	14	14				
	1/25/1997	6.80	0.004	0.002	---	---	---	---	24	13	13				
	1/27/1997	---	0.004	0.002	---	---	---	---		24	24				
	3/15/1997	6.50	---	---	---	---	---	---	24		24				
	3/16/1997	---	< 0.002	< 0.002	---	---	---	---		13	13				
	5/18/1997	6.70	< 0.002	0.003	---	---	---	---	24	13	13				
	8/3/1997	6.82	< 0.002	< 0.002	---	---	---	---	24	13	13				
	9/28/1997	6.81	< 0.002	< 0.002	---	---	---	---	24	13	13				
	11/16/1997	6.67	< 0.002	< 0.002	---	---	---	---	24	13	13				
	3/29/1998	6.59	< 0.002	< 0.002	---	---	---	---	17	17	17				
	5/17/1998	6.59	< 0.002	< 0.002	---	---	---	---	17	17	17				
	7/26/1998	6.67	< 0.002	< 0.002	---	---	---	---	17	17	17				
	9/27/1998	6.67	< 0.001	< 0.001	---	---	---	---	17	17	17				
	11/22/1998	6.51	0.0053	0.019	---	---	---	---	17	17	17				
	5/24/1999	6.38	0.012	0.0073	---	---	---	---	18	16, 18	16, 18				
	7/29/1999	6.40	0.0054	< 0.005	---	---	---	---	18	16, 18	16, 18				
	10/3/1999	6.00	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	11/14/1999	6.18	---	---	---	---	---	---	18	18	18				
	1/16/2000	6.32	< 0.010	< 0.010	---	---	---	---	19	19	19				
	4/9/2000	6.69	< 0.010	< 0.010	---	---	---	---	24	24	24				
	7/30/2000	6.71	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/23/2001	7.04	< 0.010	< 0.010	---	---	---	---	20	20	20				
	7/1/2001	6.40	---	---	---	---	---	---	20	20	20				
	8/12/2001	6.31	< 0.010	< 0.010	---	---	---	---	20	20	20				
	11/4/2001	6.40	< 0.010	< 0.010	---	---	---	---	20	20	20				
	3/8/2002	6.17	0.012	< 0.010	---	---	---	---	21	21	21				
	6/30/2002	6.28	---	---	---	---	---	---	21	21	21				
	8/18/2002	6.47	0.015	0.011	---	---	---	---	24	24	24				
	11/17/2002	6.50	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/27/2003	6.61	< 0.006	< 0.006	---	---	---	---	24	24	24				
	6/26/2003	6.65	< 0.006	< 0.006	---	---	---	---	24	24	24				
	7/18/2003	6.59	< 0.006	< 0.006	---	---	---	---	24	24	24				
	12/22/2003	6.62	< 0.006	< 0.006	---	---	---	---	24	24	24				
	3/31/2004	6.64	< 0.006	< 0.006	---	---	---	---	24	24	24				
	3/20/2005	6.26	< 0.006	< 0.006	---	---	---	---	24	24	24				
	11/22/2005	6.37	< 0.006	< 0.006	---	---	---	---	24	24	24				
MW-14	5/20/1983	---	NS	---	NS	---	---	---		24		24			
	9/16/1983	---	NS	---	NS	---	---	---		24		24			
	5/22/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24



**Table A17-2**  
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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	12/20/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	7/23/1985	---	NS	---	NS	---	NS	NS		24		24		24	24
	4/24/1986	---	NS	---	---	---	---	---		24					
	1/26/1987	---	NS	---	NS	---	---	---		24		24			
	8/17/1987	---	NS	NS	NS	NS	---	---		24	24	24	24		
	12/16/1987	---	NS	---	NS	---	---	---		24		24			
	7/8/1988	---	NS	NS	NS	---	---	---		24	24	24			
	12/19/1988	---	NS	---	---	NS	---	---		24			24		
	1/31/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/1/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/18/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/8/1990	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/17/1990	6.40	0.01	< 0.001	< 0.005	< 0.005	---	---	10	10	10	10	10		
	7/18/1990	NS	---	---	---	< 0.005	---	---	24				24		
	July 1990	6.4	0.01	0.001	< 0.005	< 0.005	---	---	23	23	23	23	23		
	9/27/1990	---	0.006	0.003	< 0.005	< 0.005	---	---		10, 12*	10, 12*	10	10		
	Sept. 1990	6.9	0.006	0.003	< 0.005	< 0.005	---	---	23	23	23	23	23		
	12/5/1990	NS	---	---	---	---	---	---	24						
	12/6/1990	NS	---	---	---	---	---	---	24						
	12/12/1990	NS	---	---	---	---	---	---	24						
	12/13/1990	NS	NS	---	---	NS	---	---	24	24			24		
	12/20/1990	NS	---	NS	NS	NS	---	---	24		24	24	24		
	1/24/1991	NS	0.005	< 0.001	---	---	---	---	24	12	12				
	1/25/1991	7.00	0.005	< 0.001	< 0.005	< 0.005	---	---	24	22	22	22	22		
	Jan. 1991	---	0.005	< 0.001	< 0.005	< 0.005	---	---		23	23	23	23		
	3/7/1991	NS	---	---	---	---	---	---	24						
	3/8/1991	NS	0.006	0.001	---	---	---	---	24	12	12				
	3/9/1991	6.80	0.006	0.001	< 0.005	---	---	---	10	10, 22	22	10, 22			
	3/10/1991	NS	---	0.001	---	< 0.005	---	---	24		24		24		
	March 1991	6.40	0.01	0.00	< 0.005	< 0.005	---	---	23	23	23	23	23		
	6/29/1991	6.80	0.004	0.001	< 0.005	---	---	---	24	12, 22	12, 22	22			
	6/30/1991	---	---	---	< 0.005	< 0.005	---	---					24		
	8/23/1991	6.40	0.001	< 0.001	---	---	---	---	24	12	12				
	8/25/1991	---	0.001	< 0.001	< 0.005	< 0.005	---	---		22	22	22	24		
	11/10/1991	6.60	0.004	< 0.002	< 0.005	< 0.005	---	---	24	12, 22	12, 22	22	24		
	2/22/1992	---	0.038	< 0.002	---	---	---	---		12	12				
	2/23/1992	6.20	---	---	< 0.005	< 0.005	---	---	24			24	24		
	4/11/1992	---	< 0.002	< 0.002	---	---	---	---		12	12				
	4/12/1992	6.30	---	---	< 0.005	---	---	---	24			24			
	6/12/1992	---	0.003	< 0.002	---	---	---	---		12	12				
	6/14/1992	6.30	---	---	< 0.005	---	---	---	24			24			
	8/8/1992	---	< 0.002	---	---	---	---	---		12					
	8/9/1992	6.60	---	---	< 0.005	---	---	---	24			24			
	10/9/1992	---	0.006	---	---	---	---	---		12					
	10/11/1992	6.30	---	---	< 0.005	---	---	---	24			24			



**Table A17-2**  
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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	2/21/1993	7.50	0.004	< 0.002	---	---	---	---	24	11	11				
	4/25/1993	5.80	0.006	< 0.002	---	---	---	---	24	11	11				
	6/6/1993	6.00	0.005	0.005	---	---	---	---	24	11	11				
	8/8/1993	7.60	<0.002	<0.002	---	---	---	---	24	11	11				
	10/8/1993	5.30	<0.002	<0.002	---	---	---	---	24	11	11				
	12/12/1993	5.50	0.003	<0.002	---	---	---	---	24	11	11				
	2/13/1994	7.40	0.008	0.008	---	---	---	---	24	24	24				
	4/17/1994	7.40	0.012	<0.002	---	---	---	---	24	24	24				
	6/12/1994	5.70	0.006	0.005	---	---	---	---	24	24	24				
	8/28/1994	6.20	0.002	<0.002	---	---	---	---	24	24	24				
	10/30/1994	6.10	<0.002	<0.002	---	---	---	---	24	24	24				
	1/29/1995	6.90	< 0.002	< 0.002	---	---	---	---	24	15	15				
	3/31/1995	---	0.005	< 0.002	---	---	---	---		15	15				
	5/21/1995	6.70	0.005	0.005	---	---	---	---	24	15	15				
	7/30/1995	---	0.004	< 0.002	---	---	---	---		15	15				
	9/24/1995	5.30	<0.002	<0.002	---	---	---	---	24	15	15				
	11/19/1995	6.10	<0.002	< 0.002	---	---	---	---	24	15	15				
	1/27/1996	6.40	< 0.002	< 0.002	---	---	---	---	24	14	14				
	3/31/1996	6.20	0.002	< 0.002	---	---	---	---	24	14	14				
	5/19/1996	6.30	0.003	< 0.002	---	---	---	---	24	14	14				
	7/21/1996	6.10	< 0.002	< 0.002	---	---	---	---	24	14	14				
	9/8/1996	6.30	< 0.002	< 0.002	---	---	---	---	24	14	14				
	11/10/1996	6.60	0.004	< 0.002	---	---	---	---	24	14	14				
	1/25/1997	6.50	0.002	< 0.002	---	---	---	---	24	13	13				
	1/27/1997	---	0.002	< 0.002	---	---	---	---		24	24				
	3/15/1997	6.40	---	---	---	---	---	---	24						
	3/16/1997	---	< 0.002	< 0.002	---	---	---	---		13	13				
	5/18/1997	6.50	< 0.002	< 0.002	---	---	---	---	24	13	13				
	8/3/1997	6.42	0.004	< 0.002	---	---	---	---	24	13	13				
	9/28/1997	NS	NS	NS	---	---	---	---	24						
	11/16/1997	6.69	< 0.002	< 0.002	---	---	---	---	24	13	13				
	3/29/1998	6.61	<0.002	<0.002	---	---	---	---	17	17	17				
	5/17/1998	6.61	< 0.002	< 0.002	---	---	---	---	24		24				
	7/26/1998	5.86	<0.002	<0.002	---	---	---	---	17	17	17				
	9/27/1998	6.10	< 0.001	< 0.001	---	---	---	---	17	17	17				
	11/22/1998	6.11	<0.005	<0.005	---	---	---	---	17	17	17				
	5/24/1999	3.84	0.0056	0.0056	---	---	---	---	18	16, 18	16, 18				
	7/29/1999	3.90	0.0061	< 0.005	---	---	---	---	18	16, 18	16, 18				
	10/3/1999	3.70	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	11/14/1999	3.76	---	---	---	---	---	---	18	18	18				
	1/16/2000	3.79	< 0.010	< 0.010	---	---	---	---	19	19	19				
	4/9/2000	6.58	< 0.010	< 0.010	---	---	---	---	24	24	24				
	7/30/2000	6.32	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/23/2001	3.94	< 0.010	< 0.010	---	---	---	---	20	20	20				
	7/1/2001	4.36	< 0.010	< 0.010	---	---	---	---	20	20	20				



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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	8/12/2001	3.92	< 0.010	< 0.010	---	---	---	---	20	20	20				
	11/4/2001	4.10	< 0.010	< 0.010	---	---	---	---	20	20	20				
	3/8/2002	4.05	0.012	< 0.010	---	---	---	---	21	21	21				
	6/30/2002	4.04	---	---	---	---	---	---	21	21	21				
	8/18/2002	6.26	< 0.010	< 0.010	---	---	---	---	24	24	24				
	11/17/2002	6.20	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/27/2003	6.64	0.008	< 0.006	---	---	---	---	24	24	24				
	6/26/2003	6.55	< 0.006	< 0.006	---	---	---	---	24	24	24				
	7/18/2003	6.39	< 0.006	< 0.006	---	---	---	---	24	24	24				
	12/22/2003	6.22	< 0.006	< 0.006	---	---	---	---	24	24	24				
	3/31/2004	6.84	< 0.006	< 0.006	---	---	---	---	24	24	24				
	3/20/2005	6.24	< 0.006	< 0.006	---	---	---	---	24	24	24				
	11/22/2005	5.97	< 0.006	< 0.006	---	---	---	---	24	24	24				
MW-15	5/20/1983	---	NS	---	NS	---	---	---		24		24			
	9/16/1983	---	NS	---	NS	---	---	---		24		24			
	5/22/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	12/20/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	7/23/1985	---	NS	---	NS	---	NS	NS		24		24		24	24
	4/24/1986	---	NS	---	---	---	---	---		24					
	1/26/1987	---	NS	---	NS	---	---	---		24		24			
	8/17/1987	---	NS	NS	NS	NS	---	---		24	24	24			
	12/16/1987	---	NS	---	NS	---	---	---		24		24			
	7/8/1988	---	NS	NS	NS	---	---	---		24	24	24			
	12/19/1988	---	NS	---	---	NS	---	---		24			24		
	1/31/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/1/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/18/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/8/1990	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/17/1990	6.90	0.01	0.003	< 0.005	< 0.005	---	---	10	10	10	10	10		
	7/18/1990	NS	---	---	---	< 0.005	---	---	24				24		
	July 1990	6.90	0.01	0.00	< 0.005	< 0.005	---	---	23	23	23	23	23		
	9/25/1990	---	0.008	0.002	< 0.005	< 0.005	---	---		10, 12*	10, 12*	10	10		
	9/27/1990	---	0.01	0.003	< 0.005	< 0.005	---	---		24	24	24	24		
	Sept. 1990	7	0.008	0.002	< 0.005	< 0.005	---	---	23	23	23	23	23		
	12/5/1990	NS	---	---	---	---	---	---	24						
	12/6/1990	NS	---	---	---	---	---	---	24						
	12/12/1990	NS	---	---	---	---	---	---	24						
	12/13/1990	NS	0.007	---	---	NS	---	---	24	24			24		
	12/20/1990	6.90	0.007	0.001	< 0.005	< 0.005	---	---	24	22, 10, 12*	22, 10, 12*	10, 22	22		
	1/24/1991	NS	---	NS	---	---	---	---	24		24				
	1/25/1991	NS	NS	---	NS	NS	---	---	24	24		24	24		
	Jan. 1991	---	0.007	0.001	< 0.005	< 0.005	---	---		23	23	23	23		
	3/7/1991	NS	---	---	---	---	---	---	24						
	3/8/1991	6.80	0.009	0.001	< 0.005	< 0.005	---	---	10	12, 22	10, 12, 22	22	10		
	3/9/1991	NS	---	---	NS	---	---	---	24			24			



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	3/10/1991	NS	---	0.001	---	< 0.005	---	---	24						
	March 1991	6.8	0.009	0.001	< 0.005	< 0.005	---	---	23	23	23	23	23		
	6/29/1991	7.00	0.009	0.001	< 0.005	---	---	---	24	12, 22	12, 22	22			
	6/30/1991	---	---	---	< 0.005	< 0.005	---	---					24		
	8/23/1991	6.80	0.009	< 0.001	---	---	---	---	24	12	12				
	8/24/1991	---	0.009	< 0.001	< 0.005	< 0.005	---	---		22	22	22	24		
	11/10/1991	7.00	0.009	< 0.002	< 0.005	< 0.005	---	---	24	12, 22	12, 22	22	24		
	2/22/1992	---	0.048	0.003	---	---	---	---		12	12				
	2/23/1992	6.90	---	---	< 0.005	< 0.005	---	---	24			24	24		
	4/11/1992	---	0.002	< 0.002	---	---	---	---		12	12				
	4/12/1992	7.00	---	---	< 0.005	---	---	---	24			24			
	6/12/1992	---	0.003	< 0.002	---	---	---	---		12	12				
	6/14/1992	6.90	---	---	< 0.005	---	---	---	24			24			
	8/8/1992	---	< 0.002	---	---	---	---	---		12					
	8/9/1992	7.30	---	---	< 0.005	---	---	---	24			24			
	10/9/1992	---	< 0.002	---	---	---	---	---		12					
	10/11/1992	7.20	---	---	< 0.005	---	---	---	24			24			
	2/21/1993	7.20	0.003	0.006	---	---	---	---	24	11	11				
	4/25/1993	7.10	0.009	< 0.002	---	---	---	---	24	11	11				
	6/6/1993	7.20	0.008	0.004	---	---	---	---	24	11	11				
	8/8/1993	8.30	0.006	0.006	---	---	---	---	24	11	11				
	10/8/1993	6.40	0.008	0.003	---	---	---	---	24	11	11				
	12/12/1993	6.90	0.004	< 0.002	---	---	---	---	24	11	11				
	2/13/1994	7.10	0.015	0.012	---	---	---	---	24	24	24				
	4/17/1994	7.20	0.016	< 0.002	---	---	---	---	24	24	24				
	6/12/1994	6.40	0.005	< 0.002	---	---	---	---	24	24	24				
	8/28/1994	6.20	0.003	< 0.002	---	---	---	---	24	24	24				
	10/30/1994	5.30	0.004	< 0.002	---	---	---	---	24	24	24				
	1/29/1995	6.80	0.002	< 0.002	---	---	---	---	24	15	15				
	3/31/1995	---	< 0.002	< 0.003	---	---	---	---		15	15				
	5/21/1995	6.80	0.007	0.002	---	---	---	---	24	15	15				
	7/30/1995	---	0.004	< 0.002	---	---	---	---		15	15				
	9/24/1995	5.80	< 0.002	0.003	---	---	---	---	24	15	15				
	11/19/1995	6.60	< 0.002	0.003	---	---	---	---	24	15	15				
	1/27/1996	7.00	< 0.002	< 0.002	---	---	---	---	24	14	14				
	3/31/1996	7.00	0.006	0.003	---	---	---	---	24	14	14				
	5/19/1996	6.70	0.003	0.004	---	---	---	---	24	14	14				
	7/21/1996	6.30	0.002	< 0.002	---	---	---	---	24	14	14				
	9/8/1996	6.80	< 0.002	0.002	---	---	---	---	24	14	14				
	11/10/1996	7.00	0.005	0.002	---	---	---	---	24	14	14				
	1/25/1997	6.80	< 0.002	< 0.002	---	---	---	---	24	13	13				
	1/27/1997	---	< 0.002	< 0.002	---	---	---	---		24	24				
	3/15/1997	6.80	---	---	---	---	---	---	24						
	3/16/1997	---	< 0.002	< 0.002	---	---	---	---		13	13				
	5/18/1997	6.80	0.002	< 0.002	---	---	---	---	24	13	13				



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**Historical Data - Groundwater Samples**  
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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	8/3/1997	6.78	0.002	< 0.002	---	---	---	---	24	13	13				
	9/28/1997	6.82	< 0.002	< 0.002	---	---	---	---	24	13	13				
	11/16/1997	6.70	0.004	0.004	---	---	---	---	24	13	13				
	3/29/1998	6.86	<0.002	<0.002	---	---	---	---	17	17	17				
	5/17/1998	6.86	< 0.002	< 0.002	---	---	---	---	17	17	17				
	7/26/1998	6.69	<0.002	<0.002	---	---	---	---	17	17	17				
	9/27/1998	6.63	< 0.001	< 0.001	---	---	---	---	17	17	17				
	11/22/1998	6.53	<0.005	<0.005	---	---	---	---	17	17	17				
	5/24/1999	6.83	0.013	0.0061	---	---	---	---	18	16, 18	16, 18				
	7/29/1999	6.70	0.0081	0.0087	---	---	---	---	18	16, 18	16, 18				
	10/3/1999	6.40	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	11/14/1999	---	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	1/16/2000	6.70	< 0.010	< 0.010	---	---	---	---	19	19	19				
	4/9/2000	6.65	< 0.010	< 0.010	---	---	---	---	24	24	24				
	7/30/2000	6.61	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/23/2001	6.65	< 0.010	< 0.010	---	---	---	---	20	20	20				
	7/1/2001	NS	< 0.010	< 0.010	---	---	---	---	20	20	20				
	8/12/2001	6.62	---	---	---	---	---	---	20	20	20				
	11/4/2001	6.70	---	---	---	---	---	---	20	20	20				
	3/8/2002	6.65	< 0.010	< 0.010	---	---	---	---	21	21	21				
	6/30/2002	6.56	---	---	---	---	---	---	21	21	21				
	8/18/2002	6.49	< 0.010	< 0.010	---	---	---	---	24	24	24				
	11/17/2002	6.74	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/27/2003	6.69	0.008	0.009	---	---	---	---	24	24	24				
	6/26/2003	6.73	< 0.006	< 0.006	---	---	---	---	24	24	24				
	7/18/2003	6.78	< 0.006	< 0.006	---	---	---	---	24	24	24				
	12/22/2003	6.70	< 0.006	< 0.006	---	---	---	---	24	24	24				
	3/31/2004	6.72	< 0.006	0.007	---	---	---	---	24	24	24				
	3/20/2005	NS	NS	NS	---	---	---	---	24	24	24				
	11/22/2005	6.02	< 0.006	< 0.006	---	---	---	---	24	24	24				
<b>MW-16</b>	5/20/1983	---	NS	---	NS	---	---	---		24		24			
	9/16/1983	---	NS	---	NS	---	---	---		24		24			
	5/22/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	12/20/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	7/23/1985	---	NS	---	NS	---	NS	NS		24		24		24	24
	4/24/1986	---	NS	---	---	---	---	---		24					
	1/26/1987	---	NS	---	NS	---	---	---		24		24			
	8/17/1987	---	NS	NS	NS	NS	---	---		24	24	24	24		
	12/16/1987	---	NS	---	NS	---	---	---		24		24			
	7/8/1988	---	NS	NS	NS	---	---	---		24	24	24			
	12/19/1988	---	NS	---	---	NS	---	---		24			24		
	1/31/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/1/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/18/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/8/1990	---	NS	NS	NS	NS	---	---		24	24	24	24		



**Table A17-2**  
**Historical Data - Groundwater Samples**  
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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	7/17/1990	NS	DRY	NS	NS	---	---	---	24	24	24	24			
	7/18/1990	NS	---	---	---	NS	---	---	24				24		
	July 1990	DRY	DRY	DRY	DRY	DRY	---	---	23	23	23	23	23		
	9/27/1990	---	DRY	DRY	< 0.005	< 0.005	---	---		24	24	24	24		
	Sept. 1990	10.7	0.028	0.008	< 0.005	< 0.005	---	---	23	23	23	23	23		
	10/1/1990	---	0.028	0.008	< 0.005	< 0.005	---	---		10, 12*	10, 12*	10	10		
	12/5/1990	10.70	DRY	DRY	---	---	---	---	24	12	12				
	12/6/1990	DRY	---	---	---	---	---	---	24						
	12/12/1990	NS	---	---	---	---	---	---	24						
	12/13/1990	NS	DRY	---	---	NS	---	---	24	24			24		
	12/20/1990	NS	---	DRY	NS	NS	---	---	24		24	24	24		
	1/24/1991	NS	---	DRY	---	---	---	---	24		24				
	1/25/1991	NS	DRY	---	NS	NS	---	---	24	24		24	24		
	Jan. 1991	---	DRY	DRY	DRY	DRY	---	---		23	23	23	23		
	3/7/1991	NS	---	---	---	---	---	---	24						
	3/8/1991	NS	DRY	---	---	---	---	---	24	24					
	3/9/1991	DRY	DRY	DRY	NS	---	---	---	10.00	12	12	24			
	3/10/1991	NS	---	DRY	---	NS	---	---	24				24		
	March 1991	DRY	DRY	DRY	DRY	DRY	---	---	23	23	23	23	23		
	6/29/1991	10.40	DRY	DRY	---	---	---	---	24	12	12				
	6/30/1991	---	---	---	DRY	DRY	---	---				24	24		
	8/23/1991	8.60	DRY	DRY	---	---	---	---	24	12	12				
	8/24/1991	---	DRY	DRY	DRY	DRY	---	---		22	22	22	22		
	11/10/1991	NS	DRY	DRY	DRY	DRY	---	---	24	12, 22	12, 22	22	22		
	2/22/1992	---	DRY	DRY	---	---	---	---		12	12				
	2/23/1992	6.90	---	---	NS	NS	---	---	24			24	24		
	4/11/1992	---	DRY	DRY	---	---	---	---		12	12				
	4/12/1992	NS	---	---	DRY	---	---	---	24			24			
	6/12/1992	---	DRY	DRY	---	---	---	---		12	12				
	6/14/1992	NS	---	---	DRY	---	---	---	24			24			
	8/8/1992	---	DRY	---	---	---	---	---		12					
	8/9/1992	NS	---	---	DRY	---	---	---	24			24			
	10/9/1992	---	DRY	---	---	---	---	---		12					
	10/11/1992	NS	---	---	DRY	---	---	---	24			24			
	2/21/1993	NS	DRY	DRY	---	---	---	---	24	11	11				
	4/25/1993	NS	DRY	DRY	---	---	---	---	24	11	11				
	6/6/1993	NS	DRY	DRY	---	---	---	---	24	11	11				
	8/8/1993	NS	DRY	DRY	---	---	---	---	24	11	11				
	10/8/1993	NS	DRY	DRY	---	---	---	---	24	11	11				
	12/12/1993	NS	DRY	DRY	---	---	---	---	24	11	11				
	2/13/1994	NS	DRY	DRY	---	---	---	---	24	24	24				
	4/17/1994	NS	DRY	DRY	---	---	---	---	24	24	24				
	6/12/1994	NS	DRY	DRY	---	---	---	---	24	24	24				
	8/28/1994	NS	DRY	DRY	---	---	---	---	24	24	24				
	10/30/1994	NS	DRY	DRY	---	---	---	---	24	24	24				



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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	1/29/1995	NS	NS	NS	---	---	---	---	24	15	15				
	3/31/1995	---	NS	NS	---	---	---	---		15	15				
	5/21/1995	NS	NS	NS	---	---	---	---	24	15	15				
	7/30/1995	---	NS	NS	---	---	---	---		15	15				
	9/24/1995	NS	NS	NS	---	---	---	---	24	15	15				
	11/19/1995	NS	NS	NS	---	---	---	---	24	15	15				
	1/27/1996	NS	NS	NS	---	---	---	---	24	14	14				
	3/31/1996	NS	NS	NS	---	---	---	---	24	14	14				
	5/19/1996	NS	DRY	DRY	---	---	---	---	24	24	24				
	7/21/1996	NS	0.002	< 0.002	---	---	---	---	24	14	14				
	9/8/1996	NS	NS	NS	---	---	---	---	24	14	14				
	11/10/1996	NS	NS	NS	---	---	---	---	24	14	14				
	1/25/1997	NS	NS	NS	---	---	---	---	24	13	13				
	1/27/1997	---	DRY	DRY	---	---	---	---		24	24				
	3/15/1997	NS	---	---	---	---	---	---	24						
	3/16/1997	---	NS	NS	---	---	---	---		13	13				
	5/18/1997	NS	NS	NS	---	---	---	---	24	13	13				
	8/3/1997	NS	NS	NS	---	---	---	---	24	13	13				
	9/28/1997	NS	NS	NS	---	---	---	---	24	13	13				
	11/16/1997	NS	NS	NS	---	---	---	---	24	13	13				
	3/29/1998	NS	NS	NS	---	---	---	---	17	17	17				
	5/17/1998	NS	NS	NS	---	---	---	---	17	17	17				
	7/26/1998	NS	NS	NS	---	---	---	---	17	17	17				
	9/27/1998	NS	NS	NS	---	---	---	---	17	17	17				
	11/22/1998	NS	NS	NS	---	---	---	---	17	17	17				
	5/24/1999	6.60	NS	NS	---	---	---	---	18	16, 18	16, 18				
	7/29/1999	6.40	NS	NS	---	---	---	---	18	16, 18	16, 18				
	10/3/1999	6.10	NS	NS	---	---	---	---	18	16, 18	16, 18				
	11/14/1999	---	---	---	---	---	---	---	18	18	18				
	1/16/2000	6.63	---	---	---	---	---	---	19	19	19				
	4/9/2000	NS	DRY	DRY	---	---	---	---	24	24	24				
	7/30/2000	NS	DRY	DRY	---	---	---	---	24	24	24				
	3/23/2001	6.41	---	---	---	---	---	---	20	20	20				
	7/1/2001	6.27	---	---	---	---	---	---	20	20	20				
	8/12/2001	6.22	---	---	---	---	---	---	20	20	20				
	11/4/2001	6.40	---	---	---	---	---	---	20	20	20				
	3/8/2002	6.49	---	---	---	---	---	---	21	21	21				
	6/30/2002	6.16	---	---	---	---	---	---	21	21	21				
	8/18/2002	NS	DRY	DRY	---	---	---	---	24	24	24				
	11/17/2002	NS	DRY	DRY	---	---	---	---	24	24	24				
	3/27/2003	NS	DRY	DRY	---	---	---	---	24	24	24				
	6/26/2003	NS	DRY	DRY	---	---	---	---	24	24	24				
	7/18/2003	NS	DRY	DRY	---	---	---	---	24	24	24				
	12/22/2003	NS	DRY	DRY	---	---	---	---	24	24	24				
	3/31/2004	NS	DRY	DRY	---	---	---	---	24	24	24				



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**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	3/20/2005	NS	DRY	DRY	---	---	---	---	24	24	24				
	11/22/2005	NS	DRY	DRY	---	---	---	---	24	24	24				
MW-16S	5/20/1983	---	NS	---	NS	---	---	---		24		24			
	9/16/1983	---	NS	---	NS	---	---	---		24		24			
	5/22/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	12/20/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	7/23/1985	---	NS	---	NS	---	NS	NS		24		24		24	24
	4/24/1986	---	NS	---	---	---	---	---		24					
	1/26/1987	---	NS	---	NS	---	---	---		24		24			
	8/17/1987	---	NS	NS	NS	NS	---	---		24	24	24	24		
	12/16/1987	---	NS	---	NS	---	---	---		24		24			
	7/8/1988	---	NS	NS	NS	---	---	---		24	24	24			
	12/19/1988	---	NS	---	---	NS	---	---		24			24		
	1/31/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/1/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/18/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/8/1990	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/17/1990	6.80	0.003	0.001	< 0.005	< 0.005	---	---	10	10	10	10	10		
	7/18/1990	NS	---	---	---	< 0.005	---	---	24				24		
	July 1990	6.80	0.00	0.00	< 0.005	< 0.005	---	---	23	23	23	23	23		
	9/25/1990	---	0.015	0.004	< 0.005	< 0.005	---	---		10	10	10	10		
	9/26/1990	---	0.003	0.001	< 0.005	< 0.005	---	---		12	12	24	24		
	Sept. 1990	6.9	0.015	0.004	< 0.005	< 0.005	---	---	23	23	23	23	23		
	12/5/1990	6.70	0.007	< 0.001	< 0.005	< 0.005	---	---	24	12, 22	10, 12, 22*	22	10, 22		
	12/6/1990	NS	---	---	---	---	---	---	24						
	12/12/1990	NS	---	---	---	---	---	---	24						
	12/13/1990	NS	0.007	---	---	< 0.005	---	---	24	24			24		
	12/20/1990	NS	---	< 0.001	< 0.005	NS	---	---	24		24	24	24		
	1/24/1991	NS	---	NS	---	---	---	---	24		24				
	1/25/1991	NS	NS	---	NS	NS	---	---	24	24		24	24		
	Jan. 1991	---	0.007	< 0.001	< 0.005	< 0.005	---	---		23	23	23	23		
	3/7/1991	6.10	0.008	< 0.001	< 0.005	< 0.005	---	---	10	10, 12, 22	10, 12, 22	10, 22	10		
	3/8/1991	NS	0.008	---	---	---	---	---	24	24					
	3/9/1991	NS	---	---	< 0.005	---	---	---	24			24			
	3/10/1991	NS	---	< 0.001	---	< 0.005	---	---	24		24		24		
	March 1991	6.8	0.008	< 0.001	< 0.005	< 0.005	---	---	23	23	23	23	23		
	6/29/1991	6.90	0.003	0.001	< 0.005	---	---	---	24	12, 22	22	22			
	6/30/1991	---	---	---	< 0.005	< 0.005	---	---				24	24		
	8/23/1991	6.40	0.012	< 0.001	---	---	---	---	24	12	12				
	8/24/1991	---	0.012	< 0.001	< 0.005	< 0.005	---	---		22	22	22	24		
	11/10/1991	6.80	0.01	< 0.002	< 0.005	< 0.005	---	---	24	12, 22	12, 22	22	24		
	2/22/1992	---	0.113	< 0.002	---	---	---	---		12	12				
	2/23/1992	6.80	---	---	< 0.005	< 0.005	---	---	24			24	24		
	4/11/1992	---	< 0.002	< 0.002	---	---	---	---		12	12				
	4/12/1992	6.30	---	---	< 0.005	---	---	---	24			24			



**Table A17-2**  
**Historical Data - Groundwater Samples**  
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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	6/12/1992	---	< 0.002	< 0.002	---	---	---	---		12	12				
	6/14/1992	6.50	---	---	< 0.005	---	---	---	24			24			
	8/8/1992	---	< 0.002	---	---	---	---	---		12					
	8/9/1992	6.40	---	---	< 0.005	---	---	---	24			24			
	10/9/1992	---	0.008	---	---	---	---	---		12					
	10/11/1992	6.60	---	---	< 0.005	---	---	---	24			24			
	2/21/1993	6.50	< 0.002	0.003	---	---	---	---	24	11	11				
	4/25/1993	6.60	0.003	0.002	---	---	---	---	24	11	11				
	6/6/1993	5.70	0.02	0.007	---	---	---	---	24	11	11				
	8/8/1993	6.50	0.004	< 0.002	---	---	---	---	24	11	11				
	10/8/1993	6.70	0.005	< 0.002	---	---	---	---	24	11	11				
	12/12/1993	6.40	0.02	0.003	---	---	---	---	24	11	11				
	2/13/1994	6.70	0.006	0.006	---	---	---	---	24	24	24				
	4/17/1994	7.30	0.015	0.006	---	---	---	---	24	24	24				
	6/12/1994	6.70	0.01	0.004	---	---	---	---	24	24	24				
	8/28/1994	6.50	0.014	< 0.002	---	---	---	---	24	24	24				
	10/30/1994	6.40	0.012	0.004	---	---	---	---	24	24	24				
	1/29/1995	6.50	0.004	< 0.002	---	---	---	---	24	15	15				
	3/31/1995	---	0.006	0.004	---	---	---	---		15	15				
	5/21/1995	6.10	0.006	0.002	---	---	---	---	24	15	15				
	7/30/1995	---	0.016	0.005	---	---	---	---		15	15				
	9/24/1995	6.20	0.002	0.006	---	---	---	---	24	15	15				
	11/19/1995	6.70	< 0.002	< 0.002	---	---	---	---	24	15	15				
	1/27/1996	6.50	< 0.002	< 0.002	---	---	---	---	24	14	14				
	3/31/1996	6.20	0.003	0.002	---	---	---	---	24	14	14				
	5/19/1996	6.10	< 0.002	0.009	---	---	---	---	24	14	14				
	7/21/1996	5.80	0.003	< 0.002	---	---	---	---	24	14	14				
	9/8/1996	6.70	< 0.002	< 0.002	---	---	---	---	24	14	14				
	11/10/1996	6.70	0.005	0.005	---	---	---	---	24	14	14				
	1/25/1997	6.40	0.003	0.003	---	---	---	---	24	13	13				
	1/27/1997	---	0.003	0.003	---	---	---	---		24					
	3/15/1997	6.10	---	---	---	---	---	---	24						
	3/16/1997	---	0.002	< 0.002	---	---	---	---		13	13				
	5/18/1997	6.20	< 0.002	0.003	---	---	---	---	24	13	13				
	8/3/1997	6.23	0.002	< 0.002	---	---	---	---	24	13	13				
	9/28/1997	6.29	0.024	0.024	---	---	---	---	24	13	13				
	11/9/1997	6.87	< 0.002	< 0.002	---	---	---	---	24	13	13				
	3/29/1998	6.32	< 0.002	< 0.002	---	---	---	---	17	17	17				
	5/17/1998	6.32	0.005	0.003	---	---	---	---	17	17	17				
	7/26/1998	6.17	0.004	< 0.002	---	---	---	---	17	17	17				
	9/27/1998	5.98	< 0.001	< 0.001	---	---	---	---	17	17	17				
	11/22/1998	5.65	0.018	0.0061	---	---	---	---	17	17	17				
	5/24/1999	6.73	0.011	0.011	---	---	---	---	18	16, 18	16, 18				
	7/29/1999	6.60	0.012	0.011	---	---	---	---	18	16, 18	16, 18				
	10/3/1999	6.30	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				



**Table A17-2**  
**Historical Data - Groundwater Samples**  
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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	11/14/1999	6.60	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	1/16/2000	6.59	< 0.010	< 0.010	---	---	---	---	19	19	19				
	4/9/2000	6.28	< 0.010	< 0.010	---	---	---	---	24	24	24				
	7/30/2000	6.25	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/23/2001	6.81	< 0.010	< 0.010	---	---	---	---	20	20	20				
	7/1/2001	6.64	---	---	---	---	---	---	20	20	20				
	8/12/2001	NS	0.012	< 0.010	---	---	---	---	20	20	20				
	11/4/2001	NS	0.012	0.01	---	---	---	---	20	20	20				
	3/8/2002	6.64	0.026	0.018	---	---	---	---	21	21	21				
	6/30/2002	6.43	---	---	---	---	---	---	21	21	21				
	8/18/2002	6.10	0.036	0.023	---	---	---	---	24	24	24				
	11/17/2002	6.84	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/27/2003	6.25	0.01	0.009	---	---	---	---	24	24	24				
	6/26/2003	6.25	0.01	0.006	---	---	---	---	24	24	24				
	7/18/2003	6.36	0.01	0.007	---	---	---	---	24	24	24				
	12/22/2003	6.25	0.006	0.007	---	---	---	---	24	24	24				
	3/31/2004	6.97	< 0.006	< 0.006	---	---	---	---	24	24	24				
	3/20/2005	6.62	< 0.006	< 0.006	---	---	---	---	24	24	24				
	11/22/2005	NS	NS	NS	---	---	---	---	24	24	24				
MW-17	5/20/1983	---	NS	---	NS	---	---	---		24		24			
	9/16/1983	---	NS	---	NS	---	---	---		24		24			
	5/22/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	12/20/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	7/23/1985	---	NS	---	NS	---	NS	NS		24		24		24	24
	4/24/1986	---	NS	---	---	---	---	---		24					
	1/26/1987	---	NS	---	NS	---	---	---		24		24			
	8/17/1987	---	NS	NS	NS	NS	---	---		24	24	24	24		
	12/16/1987	---	NS	---	NS	---	---	---		24		24			
	7/8/1988	---	NS	NS	NS	---	---	---		24	24	24			
	12/19/1988	---	NS	---	---	NS	---	---		24			24		
	1/31/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/1/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/18/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/8/1990	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/17/1990	7.10	0.003	< 0.001	< 0.005	< 0.005	---	---	10	10	10	10	10		
	7/18/1990	NS	---	---	---	< 0.005	---	---	24				24		
	July 1990	7.10	0.00	0.00	< 0.005	< 0.005	---	---	23	23	23	23	23		
	9/26/1990	---	0.003	0.034	< 0.005	< 0.005	---	---		10, 12	10, 12*	10	10		
	9/27/1990	---	0.003	0.001	< 0.005	< 0.005	---	---		24	24	24	24		
	Sept. 1990	7.1	0.034	0.003	< 0.005	< 0.005	---	---	23	23	23	23	23		
	12/5/1990	NS	---	---	---	---	---	---	24						
	12/6/1990	NS	---	---	---	---	---	---	24						
	12/12/1990	NS	---	---	---	---	---	---	24						
	12/13/1990	NS	NS	---	---	NS	---	---	24	24			24		
	12/20/1990	NS	---	NS	NS	NS	---	---	24		24	24	24		



**Table A17-2**  
**Historical Data - Groundwater Samples**  
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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	1/24/1991	7.10	0.009	< 0.001	< 0.005	< 0.005	---	---	24	12, 22	12, 22	22	22		
	1/25/1991	NS	0.009	---	< 0.005	< 0.005	---	---	24	24		24	24		
	Jan. 1991	---	0.009	< 0.001	< 0.005	< 0.005	---	---		23	23	23	23		
	3/7/1991	6.40	0.016	0.002	< 0.005	---	---	---	10	12, 22	12, 22	22			
	3/8/1991	NS	0.016	0.002	< 0.005	< 0.005	---	---	24	10	10	10	10		
	3/9/1991	NS	---	---	< 0.005	---	---	---	24			24			
	3/10/1991	NS	---	0.002	---	< 0.005	---	---	24		24		24		
	March 1991	6.4	0.016	0.002	< 0.005	< 0.005	---	---	23	23	23	23	23		
	6/29/1991	7.10	0.016	< 0.001	< 0.005	---	---	---	24	12, 22	12, 22	22			
	6/30/1991	---	---	---	< 0.005	< 0.005	---	---				24	24		
	8/23/1991	6.80	0.014	< 0.001	---	---	---	---	24	12	12				
	8/24/1991	---	0.014	< 0.001	< 0.005	< 0.005	---	---		22	22	22	24		
	11/10/1991	6.60	0.047	< 0.002	< 0.005	< 0.005	---	---	24	12, 22	12, 22	22	24		
	2/22/1992	---	0.15	< 0.002	---	---	---	---		12	12				
	2/23/1992	7.10	---	---	< 0.005	< 0.005	---	---	24			24	24		
	4/11/1992	---	0.004	< 0.002	---	---	---	---		12	12				
	4/12/1992	6.90	---	---	< 0.005	---	---	---	24			24			
	6/12/1992	---	0.007	< 0.002	---	---	---	---		12	12				
	6/14/1992	6.80	---	---	< 0.005	---	---	---	24			24			
	8/8/1992	---	< 0.002	---	---	---	---	---		12					
	8/9/1992	7.00	---	---	< 0.005	---	---	---	24			24			
	10/9/1992	---	< 0.002	---	---	---	---	---		12					
	10/11/1992	7.10	---	---	< 0.005	---	---	---	24			24			
	2/21/1993	7.10	0.003	0.004	---	---	---	---	24	11	11				
	4/25/1993	7.10	< 0.002	< 0.002	---	---	---	---	24	11	11				
	6/6/1993	7.60	0.008	0.004	---	---	---	---	24	11	11				
	8/8/1993	6.90	0.013	0.004	---	---	---	---	24	11	11				
	10/8/1993	7.00	0.006	< 0.002	---	---	---	---	24	11	11				
	12/12/1993	6.80	0.014	0.014	---	---	---	---	24	11	11				
	2/13/1994	7.50	0.006	0.002	---	---	---	---	24	24	24				
	4/17/1994	7.60	0.015	0.008	---	---	---	---	24	24	24				
	6/12/1994	7.20	0.01	0.004	---	---	---	---	24	24	24				
	8/28/1994	6.80	0.031	0.007	---	---	---	---	24	24	24				
	10/30/1994	6.80	0.007	0.002	---	---	---	---	24	24	24				
	1/29/1995	7.00	0.006	< 0.002	---	---	---	---	24	15	15				
	5/21/1995	6.70	0.004	< 0.002	---	---	---	---	24	15	15				
	7/30/1995	---	0.006	0.005	---	---	---	---		15	15				
	9/24/1995	6.50	< 0.002	< 0.002	---	---	---	---	24	15	15				
	11/19/1995	6.60	0.006	< 0.002	---	---	---	---	24	15	15				
	1/27/1996	7.20	< 0.002	< 0.002	---	---	---	---	24	14	14				
	3/31/1996	NS	NS	NS	---	---	---	---	24	14	14				
	5/19/1996	6.50	0.003	0.004	---	---	---	---	24	14	14				
	7/21/1996	6.30	0.002	< 0.002	---	---	---	---	24	14	14				
	9/8/1996	6.90	< 0.002	< 0.002	---	---	---	---	24	14	14				
	11/10/1996	6.90	0.002	0.005	---	---	---	---	24	14	14				



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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	1/25/1997	7.00	0.002	< 0.002	---	---	---	---	24	13	13				
	1/27/1997	---	0.002	< 0.002	---	---	---	---		24	24				
	3/15/1997	6.50	---	---	---	---	---	---	24						
	3/16/1997	---	< 0.002	< 0.002	---	---	---	---		13	13				
	5/18/1997	6.60	< 0.002	0.002	---	---	---	---	24	13	13				
	8/3/1997	6.58	0.002	0.002	---	---	---	---	24	13	13				
	9/28/1997	6.75	< 0.002	0.003	---	---	---	---	24	13	13				
	11/16/1997	6.72	0.005	0.003	---	---	---	---	24	13	13				
	3/29/1998	6.70	<0.002	<0.002	---	---	---	---	17	17	17				
	5/17/1998	6.70	< 0.002	< 0.002	---	---	---	---	17	17	17				
	7/26/1998	6.65	0.003	<0.002	---	---	---	---	17	17	17				
	9/27/1998	6.57	< 0.001	< 0.001	---	---	---	---	17	17	17				
	11/22/1998	6.21	<0.005	<0.005	---	---	---	---	17	17	17				
	5/24/1999	NS	0.0086	0.0094	---	---	---	---	18	16, 18	16, 18				
	7/29/1999	NS	0.026	< 0.005	---	---	---	---	18	16, 18	16, 18				
	10/3/1999	---	< 0.010	< 0.010	---	---	---	---		16, 18	16, 18				
	11/14/1999	NS	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	1/16/2000	NS	< 0.010	< 0.010	---	---	---	---	19	19	19				
	4/9/2000	6.60	< 0.010	< 0.010	---	---	---	---	24	24	24				
	7/30/2000	6.46	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/23/2001	NS	< 0.010	< 0.010	---	---	---	---	20	20	20				
	7/1/2001	NS	< 0.010	< 0.010	---	---	---	---	20	20	20				
	8/12/2001	NS	< 0.010	< 0.010	---	---	---	---	20	20	20				
	11/4/2001	NS	0.1	< 0.010	---	---	---	---	20	20	20				
	3/8/2002	NS	NS	NS	---	---	---	---	21	21	21				
	6/30/2002	NS	NS	NS	---	---	---	---	21	21	21				
	8/18/2002	NS	NS	NS	---	---	---	---	24	24	24				
	11/17/2002	6.70	0.012	< 0.010	---	---	---	---	24	24	24				
	3/27/2003	6.70	0.032	0.012	---	---	---	---	24	24	24				
	6/26/2003	6.77	0.01	< 0.006	---	---	---	---	24	24	24				
	7/18/2003	6.75	0.011	0.007	---	---	---	---	24	24	24				
	12/22/2003	6.71	0.008	< 0.006	---	---	---	---	24	24	24				
	3/31/2004	6.72	0.02	< 0.006	---	---	---	---	24	24	24				
	3/20/2005	6.23	< 0.006	< 0.006	---	---	---	---	24	24	24				
	11/22/2005	NS	NS	NS	---	---	---	---	24	24	24				
MW-18	5/20/1983	---	NS	---	NS	---	---	---		24		24			
	9/16/1983	---	NS	---	NS	---	---	---		24		24			
	5/22/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	12/20/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	7/23/1985	---	NS	---	NS	---	NS	NS		24		24		24	24
	4/24/1986	---	NS	---	---	---	---	---		24					
	1/26/1987	---	NS	---	NS	---	---	---		24		24			
	8/17/1987	---	NS	NS	NS	NS	---	---		24	24	24	24		
	12/16/1987	---	NS	---	NS	---	---	---		24		24			
	7/8/1988	---	NS	NS	NS	---	---	---		24	24	24			



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	12/19/1988	---	NS	---	---	NS	---	---		24			24		
	1/31/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/1/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/18/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/8/1990	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/17/1990	NS	0.004	< 0.001	< 0.005	< 0.005	---	---	10	10	10	10	10		
	7/18/1990	7.30	---	---	---	< 0.005	---	---	24				24		
	July 1990	7.3	0.004	0.001	< 0.005	< 0.005	---	---	23	23	23	23	23		
	9/27/1990	---	0.004	0.001	< 0.005	< 0.005	---	---		24	24	24	24		
	Sept. 1990	7.6	0.009	0.006	< 0.005	< 0.005	---	---	23	23	23	23	23		
	10/1/1990	---	0.008	0.006	< 0.005	< 0.005	---	---		10, 12*	10, 12*	10	10		
	12/5/1990	NS	---	---	---	---	---	---	24						
	12/6/1990	NS	---	---	---	---	---	---	24						
	12/12/1990	NS	---	---	---	---	---	---	24						
	12/13/1990	NS	NS	---	---	NS	---	---	24	24			24		
	12/20/1990	NS	---	NS	NS	NS	---	---	24		24	24	24		
	1/24/1991	NS	0.004	0.001	---	---	---	---	24	12	12				
	1/25/1991	7.60	0.004	0.001	< 0.005	< 0.005	---	---	24	22	22	22	22		
	Jan. 1991	---	0.004	0.001	< 0.005	< 0.005	---	---		23	23	23	23		
	3/7/1991	NS	0.005	0.002	---	---	---	---	24	12	12				
	3/8/1991	7.00	0.005	0.002	< 0.005	---	---	---	10	22	22	22			
	3/9/1991	NS	---	---	< 0.005	---	---	---	24			24			
	3/10/1991	NS	---	0.002	---	< 0.005	---	---	24		24		24		
	March 1991	7.00	0.01	0.00	< 0.005	< 0.005	---	---	23	23	23	23	23		
	6/29/1991	7.70	0.001	0.001	---	---	---	---	24		24				
	6/30/1991	---	0.001	0.001	< 0.005	< 0.005	---	---		22	22	22	24		
	8/23/1991	NS	0.005	0.001	---	---	---	---	24	12	12				
	8/25/1991	---	0.005	0.001	< 0.005	< 0.005	---	---		22	22	22	24		
	11/10/1991	7.20	0.017	< 0.002	< 0.005	< 0.005	---	---	24	12, 22	12, 22	22	24		
	2/22/1992	---	0.047	0.002	---	---	---	---		12	12				
	2/23/1992	7.20	---	---	< 0.005	< 0.005	---	---	24			24	24		
	4/11/1992	---	< 0.002	< 0.002	---	---	---	---		12	12				
	4/12/1992	7.20	---	---	< 0.005	---	---	---	24			24			
	6/12/1992	---	0.002	< 0.002	---	---	---	---		12	12				
	6/14/1992	7.20	---	---	< 0.005	---	---	---	24			24			
	8/8/1992	---	< 0.002	---	---	---	---	---		12					
	8/9/1992	7.00	---	---	< 0.005	---	---	---	24			24			
	10/9/1992	---	< 0.002	---	---	---	---	---		12					
	10/11/1992	7.00	---	---	< 0.005	---	---	---	24			24			
	2/21/1993	7.30	0.003	0.004	---	---	---	---	24	11	11				
	4/25/1993	7.40	0.002	0.002	---	---	---	---	24	11	11				
	6/6/1993	6.60	0.005	0.003	---	---	---	---	24	11	11				
	8/8/1993	7.00	0.008	< 0.002	---	---	---	---	24	11	11				
	10/8/1993	7.20	0.006	< 0.002	---	---	---	---	24	11	11				
	12/12/1993	7.50	0.013	0.01	---	---	---	---	24	11	11				



**Table A17-2**  
**Historical Data - Groundwater Samples**  
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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	2/13/1994	7.90	0.008	0.002	---	---	---	---	24	24	24				
	4/17/1994	8.80	0.006	0.002	---	---	---	---	24	24	24				
	6/12/1994	7.10	0.021	0.004	---	---	---	---	24	24	24				
	8/28/1994	7.00	0.01	<0.002	---	---	---	---	24	24	24				
	10/30/1994	7.10	0.007	<0.002	---	---	---	---	24	24	24				
	1/29/1995	7.30	0.010	<0.002	---	---	---	---	24	15	15				
	3/31/1995	---	0.005	<0.003	---	---	---	---		15	15				
	5/21/1995	6.90	0.004	0.003	---	---	---	---	24	15	15				
	7/30/1995	---	0.015	0.004	---	---	---	---		15	15				
	9/24/1995	6.10	<0.002	<0.002	---	---	---	---	24	15	15				
	11/19/1995	7.20	0.002	< 0.002	---	---	---	---	24	15	15				
	1/27/1996	6.90	< 0.002	0.005	---	---	---	---	24	14	14				
	3/31/1996	7.60	0.003	0.004	---	---	---	---	24	14	14				
	5/19/1996	7.10	0.002	0.003	---	---	---	---	24	14	14				
	7/21/1996	6.60	0.003	< 0.002	---	---	---	---	24	14	14				
	9/8/1996	6.90	< 0.002	< 0.002	---	---	---	---	24	14	14				
	11/10/1996	7.50	0.002	0.004	---	---	---	---	24	14	14				
	1/25/1997	7.40	0.003	< 0.002	---	---	---	---	24	13	13				
	1/27/1997	---	0.003	< 0.002	---	---	---	---		24	24				
	3/15/1997	6.90	---	---	---	---	---	---	24						
	3/16/1997	---	< 0.002	0.002	---	---	---	---		13	13				
	5/18/1997	6.90	< 0.002	< 0.002	---	---	---	---	24	13	13				
	8/3/1997	6.98	0.003	0.002	---	---	---	---	24	13	13				
	9/28/1997	6.94	< 0.002	< 0.002	---	---	---	---	24	13	13				
	11/9/1997	6.99	0.012	0.005	---	---	---	---	24	13	13				
	3/29/1998	6.87	0.003	<0.002	---	---	---	---	17	17	17				
	5/17/1998	6.87	< 0.002	< 0.002	---	---	---	---	17	17	17				
	7/26/1998	6.91	<0.002	<0.002	---	---	---	---	17	17	17				
	9/27/1998	7.09	0.0019	< 0.001	---	---	---	---	17	17	17				
	11/22/1998	6.76	<0.005	<0.005	---	---	---	---	17	17	17				
	5/24/1999	6.36	< 0.005	< 0.005	---	---	---	---	18	16, 18	16, 18				
	7/29/1999	6.10	0.019	< 0.005	---	---	---	---	18	16, 18	16, 18				
	10/3/1999	5.90	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	11/14/1999	6.15	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	1/16/2000	6.24	< 0.010	< 0.010	---	---	---	---	19	19	19				
	4/9/2000	6.86	< 0.010	< 0.010	---	---	---	---	24	24	24				
	7/30/2000	6.94	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/23/2001	NS	< 0.010	< 0.010	---	---	---	---	20	20	20				
	7/1/2001	---	---	---	---	---	---	---	20	20	20				
	8/12/2001	6.29	< 0.010	< 0.010	---	---	---	---	20	20	20				
	11/4/2001	6.60	< 0.010	< 0.010	---	---	---	---	20	20	20				
	3/8/2002	6.29	< 0.010	< 0.010	---	---	---	---	21	21	21				
	6/30/2002	6.12	---	---	---	---	---	---	21	21	21				
	8/18/2002	6.74	< 0.010	< 0.010	---	---	---	---	24	24	24				
	11/17/2002	NS	NS	NS	---	---	---	---	24		24				



**Table A17-2**  
**Historical Data - Groundwater Samples**  
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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	3/27/2003	6.87	0.009	0.009	---	---	---	---	24	24	24				
	6/26/2003	6.95	< 0.006	< 0.006	---	---	---	---	24	24	24				
	7/18/2003	7.02	< 0.006	< 0.006	---	---	---	---	24	24	24				
	12/22/2003	6.96	< 0.006	< 0.006	---	---	---	---	24	24	24				
	3/31/2004	6.96	< 0.006	< 0.006	---	---	---	---	24	24	24				
	3/20/2005	6.62	< 0.006	< 0.006	---	---	---	---	24	24	24				
	11/22/2005	6.79	< 0.006	< 0.006	---	---	---	---	24	24	24				
LMW-5	5/20/1983	---	NS	---	NS	---	---	---		24		24			
	9/16/1983	---	NS	---	NS	---	---	---		24		24			
	5/22/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	12/20/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	7/23/1985	---	NS	---	NS	---	NS	NS		24		24		24	24
	4/24/1986	---	NS	---	---	---	---	---		24					
	1/26/1987	---	NS	---	NS	---	---	---		24		24			
	8/17/1987	---	NS	NS	NS	NS	---	---		24	24	24	24		
	12/16/1987	---	NS	---	NS	---	---	---		24		24			
	7/8/1988	---	NS	NS	NS	---	---	---		24	24	24			
	12/19/1988	---	NS	---	---	NS	---	---		24			24		
	1/31/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/1/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/18/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/8/1990	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/17/1990	NS	NS	NS	NS	---	---	---	24	24	24	24			
	7/18/1990	NS	---	---	---	NS	---	---	24				24		
	9/27/1990	---	NS	NS	NS	NS	---	---		24	24	24	24		
	12/5/1990	NS	---	---	---	---	---	---	24						
	12/6/1990	NS	---	---	---	---	---	---	24						
	12/12/1990	NS	---	---	---	---	---	---	24						
	12/13/1990	NS	NS	---	---	NS	---	---	24	24			24		
	12/20/1990	NS	---	NS	NS	NS	---	---	24		24	24	24		
	1/24/1991	NS	---	NS	---	---	---	---	24		24				
	1/25/1991	NS	NS	---	NS	NS	---	---	24	24		24	24		
	3/7/1991	NS	---	---	---	---	---	---	24						
	3/8/1991	NS	NS	---	NS	---	---	---	24	24		24			
	3/9/1991	NS	---	---	---	---	---	---	24						
	3/10/1991	NS	---	NS	---	NS	---	---	24		24		24		
	6/29/1991	NS	NS	NS	---	---	---	---	24	24	24				
	6/30/1991	---	---	---	NS	NS	---	---				24	24		
	8/23/1991	NS	NS	NS	---	---	---	---	24	24	24				
	8/25/1991	---	---	---	NS	NS	---	---				24	24		
	11/10/1991	NS	NS	NS	NS	NS	---	---	24	24	24	24	24		
	2/22/1992	---	NS	NS	---	---	---	---		24	24				
	2/23/1992	NS	---	---	NS	NS	---	---	24			24	24		
	4/11/1992	---	NS	NS	---	---	---	---		24	24				
	4/12/1992	NS	---	---	NS	---	---	---	24			24			



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	6/12/1992	---	NS	NS	---	---	---	---		24	24				
	6/14/1992	NS	---	---	NS	---	---	---	24			24			
	8/8/1992	---	NS	---	---	---	---	---		24					
	8/9/1992	NS	---	---	NS	---	---	---	24			24			
	10/9/1992	---	NS	---	---	---	---	---		24					
	10/11/1992	NS	---	---	NS	---	---	---	24			24			
	2/21/1993	NS	NS	NS	---	---	---	---	24	24	24				
	4/25/1993	NS	NS	NS	---	---	---	---	24	24	24				
	6/6/1993	NS	NS	NS	---	---	---	---	24	24	24				
	8/8/1993	NS	NS	NS	---	---	---	---	24	24	24				
	10/10/1993	NS	NS	NS	---	---	---	---	24	24	24				
	12/12/1993	NS	NS	NS	---	---	---	---	24	24	24				
	2/13/1994	NS	NS	NS	---	---	---	---	24	24	24				
	4/17/1994	NS	NS	NS	---	---	---	---	24	24	24				
	6/12/1994	NS	NS	NS	---	---	---	---	24	24	24				
	8/28/1994	NS	NS	NS	---	---	---	---	24	24	24				
	10/30/1994	NS	NS	NS	---	---	---	---	24	24	24				
	1/29/1995	NS	NS	NS	---	---	---	---	24	24	24				
	5/21/1995	NS	NS	NS	---	---	---	---	24	24	24				
	7/30/1995	---	NS	NS	---	---	---	---		24	24				
	9/24/1995	NS	NS	NS	---	---	---	---	24	24	24				
	11/19/1995	NS	NS	NS	---	---	---	---	24	24	24				
	1/27/1996	NS	NS	NS	---	---	---	---	24	24	24				
	3/31/1996	NS	NS	NS	---	---	---	---	24	24	24				
	5/19/1996	NS	NS	NS	---	---	---	---	24	24	24				
	7/21/1996	NS	NS	NS	---	---	---	---	24	24	24				
	9/8/1996	NS	NS	NS	---	---	---	---	24	24	24				
	11/10/1996	NS	NS	NS	---	---	---	---	24	24	24				
	1/25/1997	7.90	0.005	< 0.002	---	---	---	---	24	13	13				
	1/27/1997	---	0.005	< 0.002	---	---	---	---		24	24				
	3/15/1997	NS	---	---	---	---	---	---	24						
	3/16/1997	---	NS	NS	---	---	---	---		13	13				
	5/18/1997	7.10	0.002	< 0.002	---	---	---	---	24	13	13				
	8/3/1997	7.14	< 0.002	0.002	---	---	---	---	24	13	13				
	9/28/1997	7.22	0.005	< 0.002	---	---	---	---	24	13	13				
	11/9/1997	7.14	0.004	0.004	---	---	---	---	24	13	13				
	3/29/1998	7.03	0.002	< 0.002	---	---	---	---	17	17	17				
	5/17/1998	7.03	0.006	< 0.002	---	---	---	---	17	17	17				
	7/26/1998	7.03	0.018	< 0.002	---	---	---	---	17	17	17				
	9/27/1998	7.04	0.031	< 0.001	---	---	---	---	17	17	17				
	11/22/1998	6.95	0.0086	< 0.005	---	---	---	---	17	17	17				
	5/24/1999	6.60	0.0062	0.0052	---	---	---	---	18	16, 18	16, 18				
	7/29/1999	6.60	< 0.005	< 0.005	---	---	---	---	18	16, 18	16, 18				
	10/3/1999	6.30	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	11/14/1999	6.39	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				



**Table A17-2**  
**Historical Data - Groundwater Samples**  
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Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	1/16/2000	6.75	< 0.010	< 0.010	---	---	---	---	19	19	19				
	4/9/2000	7.01	0.038	< 0.010	---	---	---	---	24	24	24				
	7/30/2000	7.06	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/23/2001	6.49	---	---	---	---	---	---	20	20	20				
	7/1/2001	6.05	< 0.010	< 0.010	---	---	---	---	20	20	20				
	8/12/2001	6.62	< 0.010	< 0.010	---	---	---	---	20	20	20				
	11/4/2001	6.60	0.013	< 0.010	---	---	---	---	20	20	20				
	3/8/2002	---	---	---	---	---	---	---	21	21	21				
	6/30/2002	NS	NS	NS	---	---	---	---	21	21	21				
	8/18/2002	6.84	< 0.010	< 0.010	---	---	---	---	24	24	24				
	11/17/2002	6.37	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/27/2003	7.10	0.007	0.008	---	---	---	---	24	24	24				
	6/26/2003	7.18	< 0.006	< 0.006	---	---	---	---	24	24	24				
	7/18/2003	7.20	< 0.006	< 0.006	---	---	---	---	24	24	24				
	12/22/2003	NS	NS	NS	---	---	---	---	24	24	24				
	3/31/2004	7.17	< 0.006	< 0.006	---	---	---	---	24	24	24				
	3/20/2005	6.75	< 0.006	< 0.006	---	---	---	---	24	24	24				
	11/22/2005	6.80	0.006	< 0.006	---	---	---	---	24	24	24				
LMW-17	5/20/1983	---	NS	---	NS	---	---	---		24		24			
	9/16/1983	---	NS	---	NS	---	---	---		24		24			
	5/22/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	12/20/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	7/23/1985	---	NS	---	NS	---	NS	NS		24		24		24	24
	4/24/1986	---	NS	---	---	---	---	---		24					
	1/26/1987	---	NS	---	NS	---	---	---		24		24			
	8/17/1987	---	NS	NS	NS	NS	---	---		24	24	24	24		
	12/16/1987	---	NS	---	NS	---	---	---		24		24			
	7/8/1988	---	NS	NS	NS	---	---	---		24	24	24			
	12/19/1988	---	NS	---	---	NS	---	---		24			24		
	1/31/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/1/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/18/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/8/1990	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/17/1990	NS	NS	NS	NS	---	---	---	24	24	24	24			
	7/18/1990	NS	---	---	---	NS	---	---	24				24		
	9/27/1990	---	NS	NS	NS	NS	---	---		24	24	24	24		
	12/5/1990	NS	---	---	---	---	---	---	24						
	12/6/1990	NS	---	---	---	---	---	---	24						
	12/12/1990	NS	---	---	---	---	---	---	24						
	12/13/1990	NS	NS	---	---	NS	---	---	24	24			24		
	12/20/1990	NS	---	NS	NS	NS	---	---	24		24	24	24		
	1/24/1991	NS	---	NS	---	---	---	---	24		24				
	1/25/1991	NS	NS	---	NS	NS	---	---	24	24		24	24		
	3/7/1991	NS	---	---	---	---	---	---	24						
	3/8/1991	NS	NS	---	---	---	---	---	24	24					



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	3/9/1991	NS	---	---	NS	---	---	---	24			24			
	3/10/1991	NS	---	NS	---	NS	---	---	24		24				
	6/29/1991	NS	NS	NS	---	---	---	---	24	24	24		24		
	6/30/1991	---	---	---	NS	NS	---	---				24	24		
	8/23/1991	NS	NS	NS	---	---	---	---	24	24	24				
	8/25/1991	---	---	---	NS	NS	---	---				24	24		
	11/10/1991	NS	NS	NS	NS	NS	---	---	24	24	24	24	24		
	2/22/1992	---	NS	NS	---	---	---	---		24	24				
	2/23/1992	NS	---	---	NS	NS	---	---	24			24	24		
	4/11/1992	---	NS	NS	---	---	---	---		24	24				
	4/12/1992	NS	---	---	NS	---	---	---	24			24			
	6/12/1992	---	NS	NS	---	---	---	---		24	24				
	6/14/1992	NS	---	---	NS	---	---	---	24			24			
	8/8/1992	---	NS	---	---	---	---	---		24					
	8/9/1992	NS	---	---	NS	---	---	---	24			24			
	10/9/1992	---	NS	---	---	---	---	---		24					
	10/11/1992	NS	---	---	NS	---	---	---	24			24			
	2/21/1993	NS	NS	NS	---	---	---	---	24	24	24				
	4/25/1993	NS	NS	NS	---	---	---	---	24	24	24				
	6/6/1993	NS	NS	NS	---	---	---	---	24	24	24				
	8/8/1993	NS	NS	NS	---	---	---	---	24	24	24				
	10/10/1993	NS	NS	NS	---	---	---	---	24	24	24				
	12/12/1993	NS	NS	NS	---	---	---	---	24	24	24				
	2/13/1994	NS	NS	NS	---	---	---	---	24	24	24				
	4/17/1994	NS	NS	NS	---	---	---	---	24	24	24				
	6/12/1994	NS	NS	NS	---	---	---	---	24	24	24				
	8/28/1994	NS	NS	NS	---	---	---	---	24	24	24				
	10/30/1994	NS	NS	NS	---	---	---	---	24	24	24				
	1/29/1995	NS	NS	NS	---	---	---	---	24	24	24				
	5/21/1995	NS	NS	NS	---	---	---	---	24	24	24				
	7/30/1995	---	NS	NS	---	---	---	---		24	24				
	9/24/1995	NS	NS	NS	---	---	---	---	24	24	24				
	11/19/1995	NS	NS	NS	---	---	---	---	24	24	24				
	1/27/1996	NS	NS	NS	---	---	---	---	24	24	24				
	3/31/1996	NS	NS	NS	---	---	---	---	24	24	24				
	5/19/1996	NS	NS	NS	---	---	---	---	24	24	24				
	7/21/1996	NS	NS	NS	---	---	---	---	24	24	24				
	9/8/1996	NS	NS	NS	---	---	---	---	24	24	24				
	11/10/1996	NS	NS	NS	---	---	---	---	24	24	24				
	1/25/1997	7.40	< 0.002	< 0.002	---	---	---	---	24	13	13				
	1/27/1997	---	< 0.002	< 0.002	---	---	---	---		24	24				
	3/15/1997	NS	---	---	---	---	---	---	24						
	3/16/1997	---	NS	NS	---	---	---	---		13	13				
	5/18/1997	7.00	< 0.002	0.003	---	---	---	---	24	13	13				
	8/3/1997	7.11	< 0.002	< 0.002	---	---	---	---	24	13	13				



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	9/28/1997	7.19	< 0.002	< 0.002	---	---	---	---	24	13	13				
	11/9/1997	7.08	0.006	0.006	---	---	---	---	24	13	13				
	3/29/1998	6.87	<0.002	<0.002	---	---	---	---	17	17	17				
	5/17/1998	6.87	< 0.002	< 0.002	---	---	---	---	17	17	17				
	7/26/1998	6.97	<0.002	<0.002	---	---	---	---	17	17	17				
	9/27/1998	7.07	0.0019	< 0.001	---	---	---	---	17	17	17				
	11/22/1998	6.83	<0.005	<0.005	---	---	---	---	17	17	17				
	5/24/1999	7.02	0.0075	< 0.005	---	---	---	---	18	16, 18	16, 18				
	7/29/1999	6.80	0.012	0.0058	---	---	---	---	18	16, 18	16, 18				
	10/3/1999	6.60	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	11/14/1999	8.82	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	1/16/2000	6.89	< 0.010	< 0.010	---	---	---	---	19	19	19				
	4/9/2000	6.88	< 0.010	< 0.010	---	---	---	---	24	24	24				
	7/30/2000	6.92	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/23/2001	7.06	---	---	---	---	---	---	20	20	20				
	7/1/2001	NS	NS	NS	---	---	---	---	20	20	20				
	8/12/2001	6.86	< 0.010	< 0.010	---	---	---	---	20	20	20				
	11/4/2001	6.90	< 0.010	< 0.010	---	---	---	---	20	20	20				
	3/8/2002	6.79	---	---	---	---	---	---	21	21	21				
	6/30/2002	NS	NS	NS	---	---	---	---	21	21	21				
	8/18/2002	6.70	0.01	< 0.010	---	---	---	---	24	24	24				
	11/17/2002	6.88	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/27/2003	6.99	0.006	0.006	---	---	---	---	24	24	24				
	6/26/2003	7.06	< 0.006	< 0.006	---	---	---	---	24	24	24				
	7/18/2003	7.03	< 0.006	< 0.006	---	---	---	---	24	24	24				
	12/22/2003	NS	NS	NS	---	---	---	---	24	24	24				
	3/31/2004	7.03	< 0.006	< 0.006	---	---	---	---	24	24	24				
	3/20/2005	6.64	< 0.006	< 0.006	---	---	---	---	24	24	24				
	11/22/2005	6.58	< 0.006	< 0.006	---	---	---	---	24	24	24				
LMW-19	5/20/1983	---	NS	---	NS	---	---	---		24		24			
	9/16/1983	---	NS	---	NS	---	---	---		24		24			
	5/22/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	12/20/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	7/23/1985	---	NS	---	NS	---	NS	NS		24		24		24	24
	4/24/1986	---	NS	---	---	---	---	---		24					
	1/26/1987	---	NS	---	NS	---	---	---		24		24			
	8/17/1987	---	NS	NS	NS	NS	---	---		24	24	24	24		
	12/16/1987	---	NS	---	NS	---	---	---		24		24			
	7/8/1988	---	NS	NS	NS	---	---	---		24	24	24			
	12/19/1988	---	NS	---	---	NS	---	---		24			24		
	1/31/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/1/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/18/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/8/1990	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/17/1990	NS	NS	NS	NS	---	---	---	24	24	24	24			



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	7/18/1990	NS	---	---	---	NS	---	---	24				24		
	9/27/1990	---	NS	NS	NS	NS	---	---		24	24	24	24		
	12/5/1990	NS	---	---	---	---	---	---	24						
	12/6/1990	NS	---	---	---	---	---	---	24						
	12/12/1990	NS	---	---	---	---	---	---	24						
	12/13/1990	NS	NS	---	---	NS	---	---	24	24			24		
	12/20/1990	NS	---	NS	NS	NS	---	---	24		24	24	24		
	1/24/1991	NS	---	NS	---	---	---	---	24		24				
	1/25/1991	NS	NS	---	NS	NS	---	---	24	24		24	24		
	3/7/1991	NS	---	---	---	---	---	---	24						
	3/8/1991	NS	NS	---	---	---	---	---	24	24					
	3/9/1991	NS	---	---	NS	---	---	---	24			24			
	3/10/1991	NS	---	NS	---	NS	---	---	24		24		24		
	6/29/1991	NS	NS	NS	---	---	---	---	24	24	24				
	6/30/1991	---	---	---	NS	NS	---	---				24	24		
	8/23/1991	NS	NS	NS	---	---	---	---	24	24	24				
	8/25/1991	---	---	---	NS	NS	---	---				24	24		
	11/10/1991	NS	NS	NS	NS	NS	---	---	24	24	24	24	24		
	2/22/1992	---	NS	NS	---	---	---	---		24	24				
	2/23/1992	NS	---	---	NS	NS	---	---	24			24	24		
	4/11/1992	---	NS	NS	---	---	---	---		24	24				
	4/12/1992	NS	---	---	NS	---	---	---	24			24			
	6/12/1992	---	NS	NS	---	---	---	---		24	24				
	6/14/1992	NS	---	---	NS	---	---	---	24			24			
	8/8/1992	---	NS	---	---	---	---	---		24					
	8/9/1992	NS	---	---	NS	---	---	---	24			24			
	10/9/1992	---	NS	---	---	---	---	---		24					
	10/11/1992	NS	---	---	NS	---	---	---	24			24			
	2/21/1993	NS	NS	NS	---	---	---	---	24	24	24				
	4/25/1993	NS	NS	NS	---	---	---	---	24	24	24				
	6/6/1993	NS	NS	NS	---	---	---	---	24	24	24				
	8/8/1993	NS	NS	NS	---	---	---	---	24	24	24				
	10/10/1993	NS	NS	NS	---	---	---	---	24	24	24				
	12/12/1993	NS	NS	NS	---	---	---	---	24	24	24				
	2/13/1994	NS	NS	NS	---	---	---	---	24	24	24				
	4/17/1994	NS	NS	NS	---	---	---	---	24	24	24				
	6/12/1994	NS	NS	NS	---	---	---	---	24	24	24				
	8/28/1994	NS	NS	NS	---	---	---	---	24	24	24				
	10/30/1994	NS	NS	NS	---	---	---	---	24	24	24				
	1/29/1995	NS	NS	NS	---	---	---	---	24	24	24				
	5/21/1995	NS	NS	NS	---	---	---	---	24	24	24				
	7/30/1995	---	NS	NS	---	---	---	---		24	24				
	9/24/1995	NS	NS	NS	---	---	---	---	24	24	24				
	11/19/1995	NS	NS	NS	---	---	---	---	24	24	24				
	1/27/1996	NS	NS	NS	---	---	---	---	24	24	24				



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	3/31/1996	NS	NS	NS	---	---	---	---	24	24	24				
	5/19/1996	NS	NS	NS	---	---	---	---	24	24	24				
	7/21/1996	NS	NS	NS	---	---	---	---	24	24	24				
	9/8/1996	NS	NS	NS	---	---	---	---	24	24	24				
	11/10/1996	NS	NS	NS	---	---	---	---	24	24	24				
	1/25/1997	NS	NS	NS	---	---	---	---	24	13	13				
	1/27/1997	---	NS	NS	---	---	---	---		24	24				
	3/15/1997	NS	---	---	---	---	---	---	24						
	3/16/1997	---	NS	NS	---	---	---	---		13	13				
	5/18/1997	6.60	< 0.002	0.003	---	---	---	---	24	13	13				
	8/3/1997	6.59	< 0.002	0.002	---	---	---	---	24	13	13				
	9/28/1997	6.65	< 0.002	< 0.002	---	---	---	---	24	13	13				
	11/9/1997	6.67	< 0.002	< 0.002	---	---	---	---	24	13	13				
	3/29/1998	6.62	< 0.002	< 0.002	---	---	---	---	17	17	17				
	5/17/1998	6.62	< 0.002	< 0.002	---	---	---	---	17	17	17				
	7/26/1998	6.48	0.002	< 0.002	---	---	---	---	17	17	17				
	9/27/1998	6.58	0.0038	0.0025	---	---	---	---	17	17	17				
	11/22/1998	6.22	< 0.005	< 0.005	---	---	---	---	17	17	17				
	5/24/1999	7.10	0.017	0.014	---	---	---	---	18	16, 18	16, 18				
	7/29/1999	7.00	0.014	0.014	---	---	---	---	18	16, 18	16, 18				
	10/3/1999	6.70	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	11/14/1999	6.93	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	1/16/2000	6.90	< 0.010	< 0.010	---	---	---	---	19	19	19				
	4/9/2000	6.52	< 0.010	< 0.010	---	---	---	---	24	24	24				
	7/30/2000	6.51	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/23/2001	NS	< 0.010	< 0.010	---	---	---	---	20	20	20				
	7/1/2001	7.00	< 0.010	< 0.010	---	---	---	---	20	20	20				
	8/12/2001	7.03	< 0.010	< 0.010	---	---	---	---	20	20	20				
	11/4/2001	7.10	< 0.010	< 0.010	---	---	---	---	20	20	20				
	3/8/2002	---	0.024	0.013	---	---	---	---	21	21	21				
	6/30/2002	7.01	---	---	---	---	---	---	21	21	21				
	8/18/2002	6.37	0.018	0.015	---	---	---	---	24	24	24				
	11/17/2002	6.74	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/27/2003	6.68	0.01	0.009	---	---	---	---	24	24	24				
	6/26/2003	6.67	0.007	< 0.006	---	---	---	---	24	24	24				
	7/18/2003	6.64	0.006	< 0.006	---	---	---	---	24	24	24				
	12/22/2003	7.00	< 0.006	< 0.006	---	---	---	---	24	24	24				
	3/31/2004	6.68	< 0.006	< 0.006	---	---	---	---	24	24	24				
	3/20/2005	6.31	< 0.006	< 0.006	---	---	---	---	24	24	24				
	11/22/2005	6.26	< 0.006	< 0.006	---	---	---	---	24	24	24				
<b>LMW-20</b>	5/20/1983	---	NS	---	NS	---	---	---		24		24			
	9/16/1983	---	NS	---	NS	---	---	---		24		24			
	5/22/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	12/20/1984	NS	NS	---	NS	---	NS	NS	24	24		24		24	24
	7/23/1985	---	NS	---	NS	---	NS	NS		24		24		24	24



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	4/24/1986	---	NS	---	---	---	---	---		24					
	1/26/1987	---	NS	---	NS	---	---	---		24		24			
	8/17/1987	---	NS	NS	NS	NS	---	---		24	24	24	24		
	12/16/1987	---	NS	---	NS	---	---	---		24		24			
	7/8/1988	---	NS	NS	NS	---	---	---		24	24	24			
	12/19/1988	---	NS	---	---	NS	---	---		24			24		
	1/31/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/1/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/18/1989	---	NS	NS	NS	NS	---	---		24	24	24	24		
	2/8/1990	---	NS	NS	NS	NS	---	---		24	24	24	24		
	7/17/1990	NS	NS	NS	NS	---	---	---	24	24	24	24			
	7/18/1990	NS	---	---	---	NS	---	---	24				24		
	9/27/1990	---	NS	NS	NS	NS	---	---		24	24	24	24		
	12/5/1990	NS	---	---	---	---	---	---	24						
	12/6/1990	NS	---	---	---	---	---	---	24						
	12/12/1990	NS	---	---	---	---	---	---	24						
	12/13/1990	NS	NS	---	---	NS	---	---	24	24			24		
	12/20/1990	NS	---	NS	NS	NS	---	---	24		24	24	24		
	1/24/1991	NS	---	NS	---	---	---	---	24		24				
	1/25/1991	NS	NS	---	NS	NS	---	---	24	24		24	24		
	3/7/1991	NS	---	---	---	---	---	---	24						
	3/8/1991	NS	NS	---	---	---	---	---	24	24					
	3/9/1991	NS	---	---	NS	---	---	---	24			24			
	3/10/1991	NS	---	NS	---	NS	---	---	24		24		24		
	6/29/1991	NS	NS	NS	---	---	---	---	24	24	24				
	6/30/1991	---	---	---	NS	NS	---	---				24	24		
	8/23/1991	NS	NS	NS	---	---	---	---	24	24	24				
	8/25/1991	---	---	---	NS	NS	---	---				24	24		
	11/10/1991	NS	NS	NS	NS	NS	---	---	24	24	24	24	24		
	2/22/1992	---	NS	NS	---	---	---	---		24	24				
	2/23/1992	NS	---	---	NS	NS	---	---	24			24	24		
	4/11/1992	---	NS	NS	---	---	---	---		24	24				
	4/12/1992	NS	---	---	NS	---	---	---	24			24			
	6/12/1992	---	NS	NS	---	---	---	---		24	24				
	6/14/1992	NS	---	---	NS	---	---	---	24			24			
	8/8/1992	---	NS	---	---	---	---	---		24					
	8/9/1992	NS	---	---	NS	---	---	---	24			24			
	10/9/1992	---	NS	---	---	---	---	---		24					
	10/11/1992	NS	---	---	NS	---	---	---	24			24			
	2/21/1993	NS	NS	NS	---	---	---	---	24	24	24				
	4/25/1993	NS	NS	NS	---	---	---	---	24	24	24				
	6/6/1993	NS	NS	NS	---	---	---	---	24	24	24				
	8/8/1993	NS	NS	NS	---	---	---	---	24	24	24				
	10/10/1993	NS	NS	NS	---	---	---	---	24	24	24				
	12/12/1993	NS	NS	NS	---	---	---	---	24	24	24				



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	2/13/1994	NS	NS	NS	---	---	---	---	24	24	24				
	4/17/1994	NS	NS	NS	---	---	---	---	24	24	24				
	6/12/1994	NS	NS	NS	---	---	---	---	24	24	24				
	8/28/1994	NS	NS	NS	---	---	---	---	24	24	24				
	10/30/1994	NS	NS	NS	---	---	---	---	24	24	24				
	1/29/1995	NS	NS	NS	---	---	---	---	24	24	24				
	5/21/1995	NS	NS	NS	---	---	---	---	24	24	24				
	7/30/1995	---	NS	NS	---	---	---	---		24	24				
	9/24/1995	NS	NS	NS	---	---	---	---	24	24	24				
	11/19/1995	NS	NS	NS	---	---	---	---	24	24	24				
	1/27/1996	NS	NS	NS	---	---	---	---	24	24	24				
	3/31/1996	NS	NS	NS	---	---	---	---	24	24	24				
	5/19/1996	NS	NS	NS	---	---	---	---	24	24	24				
	7/21/1996	NS	NS	NS	---	---	---	---	24	24	24				
	9/8/1996	NS	NS	NS	---	---	---	---	24	24	24				
	11/10/1996	NS	NS	NS	---	---	---	---	24	24	24				
	1/25/1997	NS	NS	NS	---	---	---	---	24	13	13				
	1/27/1997	---	NS	NS	---	---	---	---		24	24				
	3/15/1997	NS	---	---	---	---	---	---	24						
	3/16/1997	---	NS	NS	---	---	---	---		13	13				
	5/18/1997	7.00	0.003	0.003	---	---	---	---	24	13	13				
	8/3/1997	7.11	< 0.002	< 0.002	---	---	---	---	24	13	13				
	9/28/1997	7.12	0.002	< 0.002	---	---	---	---	24	13	13				
	11/9/1997	7.09	0.003	< 0.002	---	---	---	---	24	13	13				
	3/29/1998	7.04	0.002	< 0.002	---	---	---	---	17	17	17				
	5/17/1998	7.04	< 0.002	< 0.002	---	---	---	---	17	17	17				
	7/26/1998	7.00	< 0.002	< 0.002	---	---	---	---	17	17	17				
	9/27/1998	NS	NS	NS	---	---	---	---	17	17	17				
	11/22/1998	6.86	< 0.005	< 0.005	---	---	---	---	17	17	17				
	5/24/1999	7.02	0.0083	< 0.005	---	---	---	---	18	16, 18	16, 18				
	7/29/1999	6.90	0.011	< 0.005	---	---	---	---	18	16, 18	16, 18				
	10/3/1999	6.60	< 0.010	< 0.010	---	---	---	---	18	16, 18	16, 18				
	11/14/1999	6.86	---	---	---	---	---	---	18	18	18				
	1/16/2000	6.85	< 0.010	< 0.010	---	---	---	---	19	19	19				
	4/9/2000	6.88	< 0.010	< 0.010	---	---	---	---	24	24	24				
	7/30/2000	7.04	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/23/2001	NS	< 0.010	< 0.010	---	---	---	---	20	20	20				
	7/1/2001	NS	NS	NS	---	---	---	---	20	20	20				
	8/12/2001	6.84	< 0.010	< 0.010	---	---	---	---	20	20	20				
	11/4/2001	6.90	< 0.010	< 0.010	---	---	---	---	20	20	20				
	3/8/2002	---	< 0.010	< 0.010	---	---	---	---	21	21	21				
	6/30/2002	6.86	---	---	---	---	---	---	21	21	21				
	8/18/2002	6.88	< 0.010	< 0.010	---	---	---	---	24	24	24				
	11/17/2002	6.84	< 0.010	< 0.010	---	---	---	---	24	24	24				
	3/27/2003	7.09	0.008	0.008	---	---	---	---	24	24	24				



**Table A17-2**  
**Historical Data - Groundwater Samples**  
**Data Tables and Reference Guide**

Sample Data									References						
Well ID	Sample Date	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)	pH (s.u.)	Total Pb (mg/L)	Dissolved Pb (mg/L)	Total Cd (mg/L)	Dissolved Cd (mg/L)	Arsenic (mg/L)	Sulfate (mg/L)
	6/26/2003	7.00	< 0.006	< 0.006	---	---	---	---	24	24	24				
	7/18/2003	7.19	< 0.006	< 0.006	---	---	---	---	24	24	24				
	12/22/2003	6.60	< 0.006	< 0.006	---	---	---	---	24	24	24				
	3/31/2004	7.09	< 0.006	< 0.006	---	---	---	---	24	24	24				
	3/20/2005	6.81	< 0.006	< 0.006	---	---	---	---	24	24	24				
	11/22/2005	6.81	< 0.006	< 0.006	---	---	---	---	24	24	24				

**Reference Guide**

Reference Number	Reference Document
1	Dames and Moore, 1983. Report – Groundwater Investigation, Frisco, Texas Plant. Prepared for GNB Batteries, Inc. Metals Division. August 29.
2	Southwestern Laboratories (SWL), 1983. Letter to GNB RE: Monitor Well Water Sampling and Analyses. October 4.
3	Lake Engineering, Inc. (Lake), 1989. RCRA Facility Workplan for GNB Incorporated, Frisco, Texas. September 8.
4	Southwest Laboratories (SWL), 1987. Letter to GNB RE: Three Monitor Wells. September 10.
5	Southwestern Laboratories (SWL), 1984. Letter to Seyfarth, Shaw, Fairweather & Geraldson RE: Monitor Well Samples; Earth Samples. June 21.
6	Southwestern Laboratories (SWL), 1985. Letter to Seyfarth, Shaw, Fairweather & Geraldson RE: Monitor Well Samples; Earth Samples. January 7.
7	Lake Engineering, Inc. (Lake), 1991. RCRA Facility Investigation for GNB Incorporated, Frisco, Texas. May 8.
8	NDRC Laboratories, Inc. (NDRC), 1989. Analytical Report. February 1. Obtained from TCEQ records search.
9	Southwestern Laboratories (SWL), 1989. Letter to GNB RE: Monitor Well Sampling. March 8.
10	Resource Consultants (RCI), 1990-1991. Analytical Reports and Summary Tables, September 1990, December 1990, January 1991 and March 1991. groundwater sampling.
11	GNB Incorporated (GNB), 1994. Annual Activity Report for 1993. January 25.
12	GNB Incorporated (GNB), 1993. Annual Activity Report for 1992. May 26.
13	GNB Incorporated (GNB), 1998. Annual Activity Report for 1997. January 25.
14	GNB Incorporated (GNB), 1997. Annual Activity Report for 1996. January 25.
15	GNB Incorporated (GNB), 1996. Annual Activity Report for 1995. January 25.
16	GNB Incorporated (GNB), 2000. Annual Activity Report for 1999. March 20.
17	1998 GW sampling data provided by Exide
18	1999 GW sampling data provided by Exide
19	2000 GW sampling data provided by Exide
20	2001 GW sampling data provided by Exide
21	2002 GW sampling data provided by Exide
22	Monitoring Well Sample Results, December 1990, January 1991, March 1991, June 1991, August 1991, and November 1991; obtained from TCEQ records search
23	Lake Engineering, Inc. (Lake), 1991. RCRA Facility Investigation for GNB Incorporated, Frisco, Texas. May 8. Lake Engineering, Inc. (Lake), 1993. Addendum to the RCRA Facility Investigation for GNB Incorporated, Frisco, Texas. December 10.
24	Data provided by Conestoga-Rovers and Associates.

## Notes:

1. Sample locations shown as described in original referenced reports.
2. Data are from historical FRC documents. Not all data could be confirmed through comparison to original laboratory reports.



**Table A17-3A**  
**Historical Data - Sediment Samples**  
**Lead and Cadmium**

Sample/Location Number	Location	Depth	Total Metals		SPLP
			Lead (mg/kg)	Cadmium (mg/kg)	SPLP Cadmium (mg/kg)
Data Source: Southwestern Laboratories (SWL), 1986a. Water and Sediment Tests, GNB Lead Plant. February 21.					
2S	--	--	110	2	--
4S	--	--	2290 ppm	30	--
5S	--	--	970	5	--
6S	--	--	120	12	--
Data Source: Lake Engineering, Inc. (Lake), 1991. RCRA Facility Investigation for GNB Incorporated, Frisco, Texas. May 8.					
1-SS	Stewart Creek at NW property line	0 - 6"	1450	15.7	--
2-SS	Stewart Creek 2400 ft downstream of 5th Street	0 - 6"	784	40.3	--
3-SS	Stewart Creek 1750 ft downstream of 5th Street	0 - 6"	78100	5	--
4-SS	Stewart Creek 1300 ft downstream of 5th Street	0 - 6"	6830	27	--
5-SS	Stewart Creek 750 ft downstream of 5th Street	0 - 6"	34	3.5	--
6-SS	Stewart Creek 450 ft downstream of 5th Street	0 - 6"	334	4.8	--
7-SS	Stewart Creek at 5th Street east side of street	0 - 6"	39	3.4	--
8-SS	North Tributary 1350 ft downstream of 5th Street	0 - 6"	423	4.2	--
9-SS	North Tributary 950 ft downstream of 5th Street	0 - 6"	87	4.4	--
10-SS	Stewart Creek 100 ft upstream of 5th Street	0 - 6"	47	4.5	--
SS-1	Stewart Creek at NW property line	0 - 6"	2740	22.7	--
SS-2	Stewart Creek 2400 ft downstream of 5th Street	0 - 6"	3520	29.7	--
SS-3	Stewart Creek 1750 ft downstream of 5th Street	0 - 6"	1210	97.6	--
SS-4	Stewart Creek 1300 ft downstream of 5th Street	0 - 6"	1740	10.2	--
SS-6	Stewart Creek 450 ft downstream of 5th Street	0 - 6"	60	3.2	--
SS-8	North Tributary 1350 ft downstream of 5th Street	0 - 6"	45	4.8	--
Data Source: Background Sediment Data. Data source: GNB Incorporated (GNB), 1995. Letter to TNRCC RE: Stewart Creek Phase II Implementation. March 20.					
BSED-1	220 ft upstream of 5th Street	--	59	0.15	--
BSED-2	240 ft upstream of 5th Street	--	41	0.15	--
BSED-3	390 ft upstream of 5th Street	--	45	0.15	--
BSED-4	410 ft upstream of 5th Street	--	43	0.15	--
BSED-5	560 ft upstream of 5th Street	--	41	0.15	--
BSED-6	580 ft upstream of 5th Street	--	33	0.15	--
BSED-7	600 ft upstream of 5th Street	--	25	0.15	--
BSED-8	700 ft upstream of 5th Street	--	34	0.15	--
BSED-9	Stewart Creek and Stonebrook	--	46	2.7	--
BSED-10	Stewart Creek and Stonebrook	--	25	2.2	--
BSED-11	Stewart Creek at Preston	--	23	2.1	--
BSED-12	Stewart Creek at Preston	--	21	2	--
BSED-13	North Stewart Creek at 5th Street	--	x	2.6	--
BSED-14	North Stewart Creek at 5th Street	--	55	4	--
BSED-15	North Stewart Creek at 5th Street	--	40	2.3	--
BSED-16	North Stewart Creek at 5th Street	--	15	1.3	--
BSED-17	North Stewart Creek at 5th Street	--	36	2.72	--
BSED-18	North Stewart Creek at 5th Street	--	34	2.18	--
BSED-19	Cottonwood Creek	--	25	1.9	--
BSED-20	Cottonwood Creek	--	23	0.15	--



Table A17-3A

**Historical Data - Sediment Samples  
Lead and Cadmium**

Sample/Location Number	Location	Depth	Total Metals		SPLP
			Lead (mg/kg)	Cadmium (mg/kg)	SPLP Cadmium (mg/kg)
Data Source: GNB Incorporated (GNB), 1995. Letter to TNRCC RE: Stewart Creek Phase II Implementation. March 20.					
41	Stewart Creek 100 ft downstream of 5th Street	0 - 6"	115	0.3	--
41	Stewart Creek 100 ft downstream of 5th Street	6 - 12"	26	0.3	--
39	Stewart Creek 300 ft downstream of 5th Street	0 - 6"	37	3.3	--
37	Stewart Creek 500 ft downstream of 5th Street	0 - 6"	51	3.3	--
33	Stewart Creek 900 ft downstream of 5th Street	0 - 6"	59	0.3	--
32	Stewart Creek 1000 ft downstream of 5th Street	0 - 6"	43	0.3	--
31	Stewart Creek 1100 ft downstream of 5th Street	0 - 6"	10600	33	--
31	Stewart Creek 1100 ft downstream of 5th Street	6 - 12"	39	0.3	--
30	Stewart Creek 1200 ft downstream of 5th Street	0 - 6"	31	0.3	--
30	Stewart Creek 1200 ft downstream of 5th Street	6 - 12"	35	0.3	--
28	Stewart Creek 1400 ft downstream of 5th Street	0 - 6"	102	7	--
28	Stewart Creek 1400 ft downstream of 5th Street	6 - 12"	26	0.3	--
28	Stewart Creek 1400 ft downstream of 5th Street	12 - 18"	30	0.3	--
28	Stewart Creek 1400 ft downstream of 5th Street	18 - 24"	28	0.3	--
27	Stewart Creek 1500 ft downstream of 5th Street	0 - 6"	104	0.3	--
27	Stewart Creek 1500 ft downstream of 5th Street	6 - 12"	31	0.3	--
26	Stewart Creek 1600 ft downstream of 5th Street	0 - 6"	6990	2.2	--
25	Stewart Creek 1700 ft downstream of 5th Street	0 - 6"	276	4.7	--
24	Stewart Creek 1800 ft downstream of 5th Street	0 - 6"	225	0.3	--
24	Stewart Creek 1800 ft downstream of 5th Street	0 - 6"	66	0.3	--
23	Stewart Creek 1900 ft downstream of 5th Street	0 - 6"	272	6.2	--
22	Stewart Creek 2000 ft downstream of 5th Street	0 - 6"	357	5.2	--
22	Stewart Creek 2000 ft downstream of 5th Street	0 - 6"	402	2.3	--
21	Stewart Creek 2100 ft downstream of 5th Street	0 - 6"	313	7.7	--
20	Stewart Creek 2200 ft downstream of 5th Street	0 - 6"	371	10.4	--
19	Stewart Creek 2300 ft downstream of 5th Street	0 - 6"	96	0.3	--
19	Stewart Creek 2300 ft downstream of 5th Street	6 - 12"	20	0.3	--
19	Stewart Creek 2300 ft downstream of 5th Street	12 - 18"		0.3	--
18	Stewart Creek 2400 ft downstream of 5th Street	0 - 6"	106	0.3	--
18	Stewart Creek 2400 ft downstream of 5th Street	6 - 12"	30	0.3	--
17	Stewart Creek 2500 ft downstream of 5th Street	0 - 6"	74	3.7	--
17	Stewart Creek 2500 ft downstream of 5th Street	6 - 12"	63	0.3	--
15	Stewart Creek 2600 ft downstream of 5th Street	0 - 6"	28	0.3	--
15	Stewart Creek 2600 ft downstream of 5th Street	6 - 12"	47	0.3	--
15RR	Stewart Creek 2700 ft downstream of 5th Street	0 - 6"	184	0.3	--
15RR	Stewart Creek 2700 ft downstream of 5th Street	6 - 12"	6630	1	--
15RR	Stewart Creek 2700 ft downstream of 5th Street	12 - 18"	232	0.3	--
15RR	Stewart Creek 2700 ft downstream of 5th Street	18 - 24"	228	4.8	--
14	Stewart Creek 2800 ft downstream of 5th Street	0 - 6"	59	2.9	--
14	Stewart Creek 2800 ft downstream of 5th Street	6 - 12"	33	0.3	--
14	Stewart Creek 2800 ft downstream of 5th Street	12 - 18"	28	0.3	--



Table A17-3A

**Historical Data - Sediment Samples  
Lead and Cadmium**

Sample/Location Number	Location	Depth	Total Metals		SPLP
			Lead (mg/kg)	Cadmium (mg/kg)	SPLP Cadmium (mg/kg)
Data Source: GNB Incorporated (GNB), 1995. Letter to TNRCC RE: Stewart Creek Phase II Implementation. March 20.					
13	Stewart Creek 2900 ft downstream of 5th Street	0 - 6"	199	8.6	--
12	Stewart Creek 3000 ft downstream of 5th Street	0 - 6"	125	0.3	--
11	Stewart Creek 3100 ft downstream of 5th Street	0 - 6"	96	0.3	--
10	Stewart Creek 3200 ft downstream of 5th Street	0 - 6"	150	2.1	--
9	Stewart Creek 3300 ft downstream of 5th Street	0 - 6"	172	6.3	--
8	Stewart Creek 3400 ft downstream of 5th Street	0 - 6"	115	2.2	--
7	Stewart Creek 3500 ft downstream of 5th Street	0 - 6"	152	0.3	--
6	Stewart Creek 3600 ft downstream of 5th Street	0 - 6"	106	5.6	--
5	Stewart Creek 3700 ft downstream of 5th Street	0 - 6"	47	0.3	--
5	Stewart Creek 3700 ft downstream of 5th Street	6 - 12"	5	0.3	--
5	Stewart Creek 3700 ft downstream of 5th Street	12 - 18"	16	0.3	--
4	Stewart Creek 3800 ft downstream of 5th Street	0 - 6"	63	1.6	--
4	Stewart Creek 3800 ft downstream of 5th Street	6 - 12"	51	2.6	--
3	Stewart Creek 3900 ft downstream of 5th Street	0 - 6"	154	1.4	--
3	Stewart Creek 3900 ft downstream of 5th Street	6 - 12"	53	0.3	--
2	Stewart Creek 4000 ft downstream of 5th Street	0 - 6"	196	1.4	--
2	Stewart Creek 4000 ft downstream of 5th Street	6 - 12"	16	0.3	--
2	Stewart Creek 4000 ft downstream of 5th Street	12 - 18"	80	3.7	--
1	Stewart Creek 4100 ft downstream of 5th Street	0 - 6"	5	0.3	--
1	Stewart Creek 4100 ft downstream of 5th Street	6 - 12"	28	0.3	--
48	Stewart Creek 4200 ft downstream of 5th Street	0 - 6"	88	6.6	--
47	Stewart Creek 4300 ft downstream of 5th Street	0 - 6"	104	3	--
46	Stewart Creek 4400 ft downstream of 5th Street	0 - 6"	90	3.3	--
46	Stewart Creek 4400 ft downstream of 5th Street	0 - 6"	74	3.5	--
45	Stewart Creek 4500 ft downstream of 5th Street	0 - 6"	68	4.1	--
44	Stewart Creek 4600 ft downstream of 5th Street	0 - 6"	47	5.2	--
44	Stewart Creek 4600 ft downstream of 5th Street	6 - 12"	96	3.4	--
43	Stewart Creek 4700 ft downstream of 5th Street	0 - 6"	76	4	--
42	Stewart Creek 4800 ft downstream of 5th Street	0 - 6"	112	4.8	--
42	Stewart Creek 4800 ft downstream of 5th Street	6 - 12"	92	7.5	--
49	Stewart Creek 4900 ft downstream of 5th Street	0 - 6"	67	3.1	--
50	Stewart Creek 5000 ft downstream of 5th Street	0 - 6"	96	4.3	--
51	Stewart Creek 5100 ft downstream of 5th Street	0 - 6"	76	5.2	--
51	Stewart Creek 5100 ft downstream of 5th Street	6 - 12"	55	5	--
52	Stewart Creek 5200 ft downstream of 5th Street	0 - 6"	106	3.4	--
53	Stewart Creek 5300 ft downstream of 5th Street	0 - 6"	68	3.3	--
54	Stewart Creek 5400 ft downstream of 5th Street	0 - 6"	100	3.6	--
55	Stewart Creek 5500 ft downstream of 5th Street	0 - 6"	65	3.8	--
71	Stewart Creek 6200 ft downstream of 5th Street	0 - 6"	107	2.9	--
70	Stewart Creek 6300 ft downstream of 5th Street	0 - 6"	93	3	--
69	Stewart Creek 6400 ft downstream of 5th Street	0 - 6"	80	2.8	--
68	Stewart Creek 6500 ft downstream of 5th Street	0 - 6"	303	7.1	--



Table A17-3A

**Historical Data - Sediment Samples  
Lead and Cadmium**

Sample/Location Number	Location	Depth	Total Metals		SPLP
			Lead (mg/kg)	Cadmium (mg/kg)	SPLP Cadmium (mg/kg)
Data Source: GNB Incorporated (GNB), 1995. Letter to TNRCC RE: Stewart Creek Phase II Implementation. March 20.					
67	Stewart Creek 6600 ft downstream of 5th Street	0 - 6"	106	2.7	--
66	Stewart Creek 6700 ft downstream of 5th Street	0 - 6"	158	8.8	--
65	Stewart Creek 6800 ft downstream of 5th Street	0 - 6"	97	3.5	--
64	Stewart Creek 6900 ft downstream of 5th Street	0 - 6"	60	5.7	--
63	Stewart Creek 7000 ft downstream of 5th Street	0 - 6"	442	37	--
62	Stewart Creek 7100 ft downstream of 5th Street	0 - 6"	69	7	--
61	Stewart Creek 7200 ft downstream of 5th Street	0 - 6"	323	13	--
60	Stewart Creek 7300 ft downstream of 5th Street	0 - 6"	80	6.9	--
59	Stewart Creek 7400 ft downstream of 5th Street	0 - 6"	142	10	--
58	Stewart Creek 7500 ft downstream of 5th Street	0 - 6"	88	5.7	--
57	Stewart Creek 7600 ft downstream of 5th Street	0 - 6"	155	18	--
56	Stewart Creek 7700 ft downstream of 5th Street	0 - 6"	91	2.2	--
Data Source: Table A-5, Sediment Sampling Results Lead and Cadmium, RMT - 5/19/1995					
SD-109	Stewart Cr. 1000 ft downstream of Bowan Rd. Bridge	0 - 6"	49	3.3	--
SD-110B	Stewart Creek on west side of Bowan Road Bridge	0 - 6"	56	3.4	--
SB-111	Stewart Cr. due north of Stewart Creek West WWTP	0 - 6"	63	3.7	--
Data Source: RMT/Jones & Neuse, Inc. (RMT/JN), 1996. Stewart Creek Final Phase II Report, GNB Technologies, Frisco, Texas. May.					
SD-01-02	--	--	18	2.9	--
SD-01-02	--	--	14	2.3	--
SD-01-03	--	--	15	2.2	--
SD-01-04	--	--	18	2.5	--
SD-01-05	--	--	16	2.8	--
SD-02-01	--	--	16	2.3	--
SD-02-02	--	--	15	2.6	--
SD-02-03	--	--	16	2.2	--
SD-02-04	--	--	20	3.8	<0.005
SD-02-05	--	--	23	3.2	--
SD-DUP-1	--	--	19	2.5	--
SD-03-01	--	--	15	1.9	--
SD-03-02	--	--	14	2.2	--
SD-03-03	--	--	21	3	--
SD-04-01	--	--	12	1.1	<0.005
SD-04-02	--	--	13	1.2	--
SD-04-03	--	--	11	1	--
SD-04-04	--	--	9	0.91	--
SD-04-05	--	--	10	<0.70	--
SD-05-01	--	--	13	1.2	--
SD-05-02	--	--	14	2.7	--
SD-05-03	--	--	11	1	--
SD-06-01	--	--	23	2.8	--
SD-06-02	--	--	23	4.5	--
SD-06-03	--	--	24	6.9	<0.005
SD-DUP-2	--	--	25	4	--



**Table A17-3A**  
**Historical Data - Sediment Samples**  
**Lead and Cadmium**

Sample/Location Number	Location	Depth	Total Metals		SPLP
			Lead (mg/kg)	Cadmium (mg/kg)	SPLP Cadmium (mg/kg)
Data Source: JD Consulting, L.P. (JDC), 2000. Stewart Creek Corrective Measures Implementation Report. Report prepared for GNB and submitted to the TNRCC, July 13.					
Downstream 20	Station 1+00 North Side Wall	--	70	0.79	--
Downstream 20	Station 1+00 Centerline	--	32	0.37	--
Downstream 20	Station 1+00 South Side Wall	--	7.4	0.21	--
Downstream 19	Station 2+00 North Side Wall	--	68	0.9	--
Downstream 19	Station 2+00 Centerline	--	4.8	0.28	--
Downstream 19	Station 2+00 South Side Wall	--	58	0.6	--
Downstream 18	Station 3+00 North Side Wall	--	79	0.59	--
Downstream 18	Station 3+00 Centerline	--	6.5	0.3	--
Downstream 18	Station 3+00 South Side Wall	--	10	0.26	--
Downstream 17	Station 4+00 North Side Wall	--	84	2.4	--
Downstream 17	Station 4+00 Centerline	--	11	<0.2	--
Downstream 17	Station 4+00 South Side Wall	--	8.9	0.4	--
Downstream 16	Station 5+00 North Side Wall	--	44	2.1	--
Downstream 16	Station 5+00 Centerline	--	12	BDL	--
Downstream 16	Station 5+00 South Side Wall	--	12	BDL	--
Downstream 15	Station 6+00 North Side Wall	--	6.9	0.2	--
Downstream 15	Station 6+00 Centerline	--	5.9	0.4	--
Downstream 15	Station 6+00 South Side Wall	--	10	BDL	--
Downstream 14	Station 7+00 North Side Wall	--	6.9	0.3	--
Downstream 14	Station 7+00 Centerline	--	6.8	0.3	--
Downstream 14	Station 7+00 South Side Wall	--	8.1	0.3	--
Downstream 13	Station 8+00 North Side Wall	--	6.8	0.4	--
Downstream 13	Station 8+00 Centerline	--	16	0.3	--
Downstream 13	Station 8+00 South Side Wall	--	6.9	0.3	--
Downstream 12	Station 9+00 North Side Wall	--	0.3	10	--
Downstream 12	Station 9+00 Centerline	--	0.8	9.4	--
Downstream 12	Station 9+00 South Side Wall	--	8.7	0.41	--
Downstream 11	Station 10+00 North Side Wall	--	8.2	1.3	--
Downstream 11	Station 10+00 Centerline	--	6.2	0.5	--
Downstream 11	Station 10+00 South Side Wall	--	6.4	0.6	--
Downstream 10	Station 11+00 North Side Wall	--	6	0.3	--
Downstream 10	Station 11+00 Centerline	--	6.3	0.3	--
Downstream 10	Station 11+00 South Side Wall	--	8.8	0.3	--
Downstream 9	Station 12+00 North Side Wall	--	54	0.5	--
Downstream 9	Station 12+00 Centerline	--	6.3	0.3	--
Downstream 9	Station 12+00 South Side Wall	--	6.1	0.3	--
Downstream 8	Station 13+00 North Side Wall	--	6.8	0.4	--
Downstream 8	Station 13+00 Centerline	--	16	0.3	--
Downstream 8	Station 13+00 South Side Wall	--	6.9	0.3	--
Downstream 7	Station 14+00 North Side Wall	--	6.9	0.3	--
Downstream 7	Station 14+00 Centerline	--	6.8	0.3	--
Downstream 7	Station 14+00 South Side Wall	--	8.1	0.3	--



**Table A17-3A**  
**Historical Data - Sediment Samples**  
**Lead and Cadmium**

Sample/Location Number	Location	Depth	Total Metals		SPLP
			Lead (mg/kg)	Cadmium (mg/kg)	SPLP Cadmium (mg/kg)
Data Source: JD Consulting, L.P. (JDC), 2000. Stewart Creek Corrective Measures Implementation Report. Report prepared for GNB and submitted to the TNRCC, July 13.					
Downstream 6	Station 15+00 North Side Wall	--	6.9	0.2	--
Downstream 6	Station 15+00 Centerline	--	5.9	0.4	--
Downstream 6	Station 15+00 South Side Wall	--	10	BDL	--
Downstream 5	Station 16+00 North Side Wall	--	44	BDL	--
Downstream 5	Station 16+00 Centerline	--	12	BDL	--
Downstream 5	Station 16+00 South Side Wall	--	12	0.2	--
Downstream 4	Station 17+00 North Side Wall	--	84	2.4	--
Downstream 4	Station 17+00 Centerline	--	11	0.2	--
Downstream 4	Station 17+00 South Side Wall	--	8.9	0.4	--
Downstream 3	Station 18+00 North Side Wall	--	79	0.59	--
Downstream 3	Station 18+00 Centerline	--	6.5	0.3	--
Downstream 3	Station 18+00 South Side Wall	--	10	0.26	--
Downstream 2	Station 19+00 North Side Wall	--	68	0.9	--
Downstream 2	Station 19+00 Centerline	--	4.8	0.28	--
Downstream 2	Station 19+00 South Side Wall	--	58	0.6	--
Downstream 1	Station 20+00 North Side Wall	--	70	0.79	--
Downstream 1	Station 20+00 Centerline	--	32	0.37	--
Downstream 1	Station 20+00 South Side Wall	--	7.4	0.21	--
Upstream 1	Station 21+00 North Side Wall	--	7.2	0.4	--
Upstream 1	Station 21+00 Centerline	--	5.1	0.2	--
Upstream 1	Station 21+00 South Side Wall	--	11	0.34	--
Upstream 2	Station 22+00 North Side Wall	--	35	0.5	--
Upstream 2	Station 22+00 Centerline	--	9	0.32	--
Upstream 2	Station 22+00 South Side Wall	--	8.2	0.28	--
Upstream 3	Station 23+00 North Side Wall	--	8	0.31	--
Upstream 3	Station 23+00 Centerline	--	32	0.4	--
Upstream 3	Station 23+00 South Side Wall	--	8.3	0.38	--
Upstream 4	Station 24+00 North Side Wall	--	7.3	0.28	--
Upstream 4	Station 24+00 Centerline	--	15	0.3	--
Upstream 4	Station 24+00 South Side Wall	--	55	0.61	--
Upstream 5	Station 25+00 North Side Wall	--	18	0.32	--
Upstream 5	Station 25+00 Centerline	--	51	0.59	--
Upstream 5	Station 25+00 South Side Wall	--	11	0.29	--
Upstream 6	Station 26+00 North Side Wall	--	15	0.46	--
Upstream 6	Station 26+00 Centerline	--	13	0.46	--
Upstream 6	Station 26+00 South Side Wall	--	5.7	0.2	--
Upstream 7	Station 27+00 North Side Wall	--	13	0.39	--
Upstream 7	Station 27+00 Centerline	--	86	0.65	--
Upstream 7	Station 27+00 South Side Wall	--	5.4	0.21	--

## Notes:

1. Data are from historical FRC documents. Not all data could be confirmed through comparison to original laboratory reports.
2. Sample locations shown as described in original referenced reports.
3. Shaded cells indicate samples that were collected within areas that have been remediated since collection of the samples, either in 1986 (SWL, 1986b-1986d) or 2000 (JDC, 2000).
4. BDL = Below Detection Limit



**Table A17-3B**  
**Historical Data - Sediment Samples**  
**Lead, Cadmium, and Other Analytes**

Analyte	Stewart Creek #1	Stewart Creek #2	Stewart Creek #3
	01/08/91	01/09/91	01/09/91
<b>Data Source: Resource Consultants, Inc. (RCI), 1991. Stream Investigation, Stewart Creek, Collin County, Texas. RCI Project No. 1-3340, February.</b>			
Aluminum	1970	1640	1580
Antimony	<1	<1	<1
Arsenic	0.8	1.3	7.2
Barium	27	190	456
Cadmium	<0.3	22	13
Calcium	25300	144000	220000
Chromium	5	16	10
Copper	5	12	13
Lead	25	28	11
Magnesium	504	1070	1430
Mercury	<0.1	<0.1	<0.1
Selenium	<1	<1	<1
Silver	<0.5	<0.5	<0.5
Sodium	100	1340	709
Zinc	15	48	407
Ammonia	39	210	23.7
Chloride	<100	<100	<100
Sulfate	<500	600	600
Total Phosphorus	930	940	5940
% Total Solids	51.8	55.4	84.6

## Notes:

1. Data are from historical FRC documents. Not all data could be confirmed through comparison to original laboratory reports.
2. Sample locations shown as described in original referenced reports.
3. Results in mg/kg.



**Table A17-4A**  
**Historical Data - Surface Water Samples**  
**Lead and Cadmium**

Sample/Location Number	Total Metals		Dissolved Metals		pH
	Lead (mg/l)	Cadmium (mg/l)	Lead (mg/l)	Cadmium (mg/l)	
Data Source: Lake Engineering, Inc. (Lake), 1991. RCRA Facility Investigation for GNB Incorporated, Frisco, Texas. May 8.					
1SW001	0.014	0.030	0.001	<0.005	8.0
2SW001	0.015	<0.005	0.001	<0.005	7.8
3SW001	0.027	<0.005	0.001	<0.005	8.0
4SW001	0.012	<0.005	0.001	<0.005	7.9
5SW001	<0.001	<0.005	0.001	<0.005	7.9
6SW001	0.002	<0.005	0.001	<0.005	8.1
7SW001	0.002	<0.005	0.001	<0.005	7.8
8SW001	0.004	<0.005	0.001	<0.005	7.7
9SW001	0.017	<0.005	0.001	<0.005	7.8
10SW001	0.001	<0.005	0.001	<0.005	8.0
11SW001	15.4	0.190	0.370	0.030	7.2
Data Source: Southwestern Laboratories (SWL), 1986a. Water and Sediment Tests, GNB Lead Plant. February 21.					
1W	<0.01	<0.01	--	--	--
3W	0.01	<0.01	--	--	--
6W	<0.01	0.01	--	--	--

## Notes:

1. Sample locations shown as described in original referenced reports.
2. Data are from historical FRC documents. Not all data could be confirmed through comparison to original laboratory reports.



**Table A17-4B**  
**Historical Data - Surface Water Samples**  
**Lead, Cadmium, and Other Analytes**

Analyte	Stewart Creek #1	Stewart Creek #2	Stewart Creek #3
	01/08/91	01/09/91	01/09/91
<b>Data Source: Resource Consultants, Inc. (RCI), 1991. Stream Investigation, Stewart Creek, Collin County, Texas. RCI Project No. 1-3340, February.</b>			
Aluminum	<0.01	0.5	0.5
Antimony	<0.005	0.031	0.021
Arsenic	<0.002	0.003	0.004
Barium	<0.1	<0.1	<0.1
Cadmium	<0.005	<0.005	<0.005
Calcium	86.4	79.6	88.3
Chromium	<0.02	<0.02	<0.02
Copper	<0.01	<0.01	<0.01
Lead	0.005	0.019	0.016
Magnesium	2.09	3.81	3.11
Mercury	<0.0002	<0.0002	<0.0002
Selenium	0.01	0.02	0.01
Silver	<0.01	<0.01	<0.01
Sodium	21	729	312
Zinc	0.02	0.04	0.03
Chloride	8	51	52
Ammonia	<0.1	0.98	1
Sulfate	64	1320	880
Total Dissolved Solids (TDS)	0.04	1.3	1.28
Total Phosphorus	320	2390	1890

Notes:

1. Sample locations shown as described in original referenced reports.
2. Data are from historical FRC documents. Not all data could be confirmed through comparison to original laboratory reports.
3. Results in mg/L.



**APPENDIX 18**  
**W&M SLAG AND BATTERY CASE CHIP SURVEY REPORTS**





March 28, 2011

Mr. James Messer  
Exide Technologies  
7471 South Fifth Street  
Frisco, Texas 75034

RE: Suspect Slag Sampling Report  
Stewart Creek – West Segment  
Exide Technologies  
Frisco, Texas  
W&M Project No. 112.041

Dear Mr. Messer:

W&M Environmental Group, Inc. (W&M) prepared this report to present the status and results of the assessment of suspect slag material located in and along the banks of the western reach of Stewart Creek at the Exide Technologies (Exide) facility located at 7471 South Fifth Street in Frisco, Texas (Site). The Site location is presented on **Figure 1**. The results of the preliminary visual assessment were presented in the November 2, 2009, Sampling Plan for material suspected of being slag.

## BACKGROUND

Slag from on-Site operations was historically used to line segments of Stewart Creek to protect the bank from erosion. The slag was removed in the past, but some material was observed along the creek after being exposed by stream erosion. An assessment of the suspect slag visible in the stream bank and stream bed was completed by Mr. James Messer of Exide and Mr. Aaron Brewer of W&M on May 21, 2009. On June 5, 2009, Mr. Brewer and Mr. Steven Furlough, both of W&M, identified and mapped areas where suspect slag or rocks that looked similar to slag were observed in and adjacent to the creek. Based on the first two reconnaissance events, 12 areas with suspect slag were initially mapped with a global positioning system (GPS). The locations of GPS points that mark the approximate extents of “slag fields” are represented on **Figures 2, 3, and 4**. As a general impression from the first two reconnaissance events, the extent of suspect slag material appeared limited to 12 “slag fields” and the distinction between slag and other materials was in a few instances uncertain. Therefore, 12 samples were collected from representative materials suspected of constituting slag in several areas across the Site. The results of that sampling event are described below.

## SAMPLING PROCEDURE

On November 11, 2009, representative samples of material suspected of constituting slag were collected from 12 specimens located within Stewart Creek and from the banks of the creek. Each sample was photographed and photographs are presented in **Attachment A**. The location coordinates of each sample was recorded with a GPS. Both the suspected slag sightings mapped

[www.wh-m.com](http://www.wh-m.com)

### PLANO CORPORATE OFFICE

906 E 18th Street  
Plano, TX 75074  
972-516-0300

### AUSTIN

3706 Speedway  
Austin, TX 78705  
512-493-9691

### HOUSTON

1215 Durham Drive  
Houston, TX 77007  
713-316-0025



Mr. James Messer

March 28, 2011

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on June 5, 2009, and the sample locations from November 11, 2009, are represented on **Figures 1, 2, and 3**.

Material was removed from each sample by use of a stainless steel chisel and hammer. Samples were placed in 4-ounce glass jars and submitted to Oxidor Laboratories, LLC in Plano, Texas for analysis. The laboratory prepared each sample by pulverizing the rock fragments. Each sample was analyzed for calcium, iron, and lead by Environmental Protection Agency (EPA) Method 6020 to provide data for determining natural material from material suspected of being slag. The results were reported on a wet weight basis and are presented in **Attachment B**. The data are summarized in **Table 1**.

## **SAMPLE RESULTS**

Based on the analytical results, six of the samples appear to have been from natural materials (limestone) that resemble slag and the other six are “probable slag.” The natural materials each had 1/3 or more of their content by weight as calcium ranging from 339,000 milligrams per kilogram (mg/kg) to 401,000 mg/kg. The natural materials had corresponding iron contents ranging from 2,450 mg/kg to 10,600 mg/kg. The lead concentrations in the natural materials ranged from 1.21 mg/kg to 9.26 mg/kg, which is below the soil background concentration for Texas of 15 mg/kg.

The material identified as probable slag all had comparatively lower calcium concentrations ranging from 1,010 mg/kg to 62,800 mg/kg and much higher iron concentrations ranging from 102,000 mg/kg to 560,000 mg/kg. The lead concentrations in the probable slag were also much higher ranging from 11,500 mg/kg to 102,000 mg/kg.

The location of materials identified as probable slag based on laboratory results were mostly near the middle of the Site. The results of the laboratory samples along with the visual assessment indicate that the probable slag is concentrated on the eastern portion of the study Site, with fewer suspect materials observed to the west and no positive test results identifying suspect slag within 450 feet of the west boundary.

Due to an equipment malfunction, the resolution of the photographs in the log are not as clear as desired; however, the sampling team has gained experience identifying probable slag materials that can be compared to their sample results. The visual comparison between probable slag material and non-slag material reveals that probable slag material has a range of color, sizes, and shapes. Although not uniform, the probable slag material tended to have darker gray, bluish gray, and/or reddish colors compared to non-slag material that tended to be lighter colored (light gray and yellowish brown) and was more readily identifiable as limestone, based on the lighter colors. Most of the non-slag material that was suspected of being slag appeared to be imported material for use as rip-rap. Based on the differences in calcium content between probable slag and natural materials, a “fizz test” using an acid such as hydrogen chloride or vinegar could be used to compare the intensity of effervescence (bubbling) produced between the natural materials high in calcium carbonate and comparatively low calcium content of the probable slag.

## **CONCLUSIONS**

Probable slag materials have been identified in the western reach of Steward Creek at the Site. The probable slag generally has darker colors along with reddish hues whereas the natural



Mr. James Messer

March 28, 2011

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materials suspected of being slag tended to be lighter colored and more readily identifiable as limestone rip-rap. The probable slag samples had much higher concentrations of lead and iron than the non-slag samples, which contained about 1/3 or more percentage calcium. The location of materials identified as probable slag based on laboratory samples suggests that slag materials are concentrated near the middle of the Site, but are also present to the eastern boundary of the study Site. When the analytical data are considered in combination with the distribution of probable slag, the slag may not extend to the western boundary of the Site.

#### GENERAL QUALIFICATIONS

This report was prepared for the sole use of Exide Technologies, Inc. and shall not be relied upon by any other party without the express prior written consent of Exide and W&M. This document was developed by employing generally accepted methods and customary practices of the environmental profession.

W&M appreciates the opportunity to be of service to you on this project. If you have any questions or need additional information, please contact Aaron Brewer or Michael Whitehead at 972-516-0300.

Very truly yours,

W&M ENVIRONMENTAL GROUP, INC.

W&M ENVIRONMENTAL GROUP, INC.

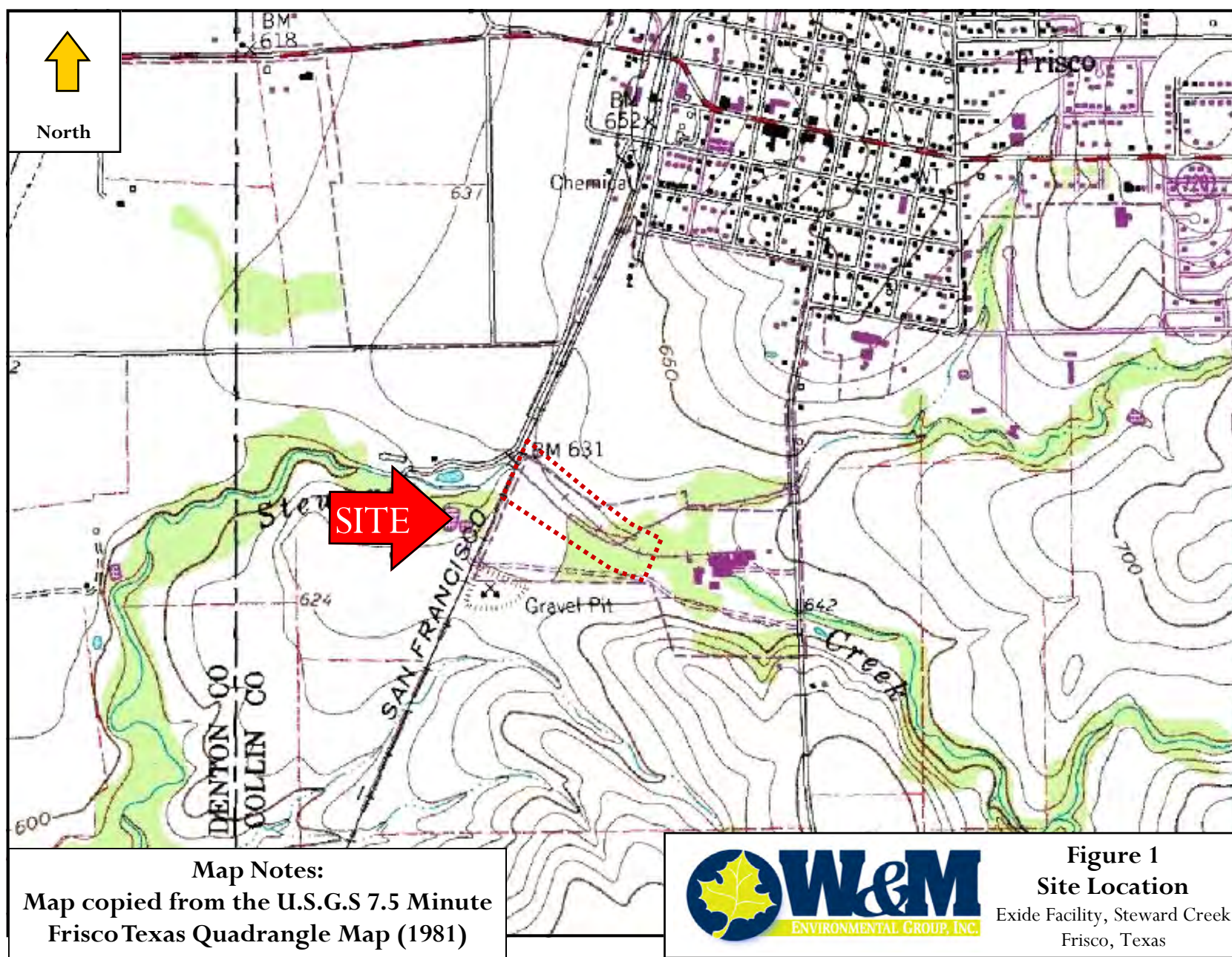


Aaron Brewer, P.G.  
Project Manager



Michael Whitehead  
Senior Consultant





03-07-11

Slag Sampling Report

W&amp;M Project No.: 112.041





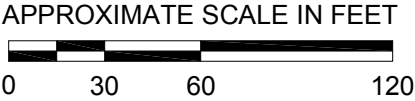
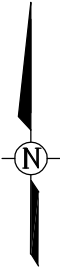




LEGEND

- WP## = GPS Way Points at Locations Near Suspect Slag
- SL-## = Approximate Location of Suspect Slag Sample
- Roadways
- - - Detention Pond
- ||||| Railroad Tracks
- . . Tributary Line
- - - Wetland Boundary

Notes:  
Topographic detail of project Site provided by Doug Connelly & Associates, Inc. Licensed Professional Surveyors, from GPS survey on the ground in June, 2009.  
  
Aerial photograph from Google Earth dated December, 2009.



**Figure 3**  
**Sample Location Map - Northwest**  
Exide Facility - Stewart Creek  
Frisco, Texas



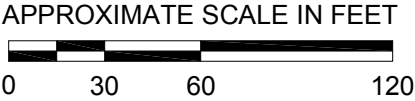




LEGEND

- WP## = GPS Way Points at Locations Near Suspect Slag
- ⊙ SL-## = Approximate Location of Suspect Slag Sample
- Roadways
- - - Detention Pond
- ||||| Railroad Tracks
- · - · - Tributary Line
- - - - - Wetland Boundary

Notes:  
Topographic detail of project Site provided by Doug Connelly & Associates, Inc. Licensed Professional Surveyors, from GPS survey on the ground in June, 2009.  
  
Aerial photograph from Google Earth dated December, 2009.



**Figure 4**  
**Sample Location Map - Southeast**  
Exide Facility - Stewart Creek  
Frisco, Texas





**TABLE 1**  
**SUMMARY OF SLAG AND ROCK ANALYTICAL DATA**

*Exide Facility, Stewart Creek*  
*Frisco, Texas*

Sample ID <sup>1</sup>	SL-01	SL-02	SL-03	SL-04	SL-05	SL-06	SL-07	SL-08	SL-09	SL-10	SL-11	SL-12
Sample Date	11/11/09	11/11/09	11/11/09	11/11/09	11/11/09	11/11/09	11/11/09	11/11/09	11/11/09	11/11/09	11/11/09	11/11/09
Calcium	21,800	401,000	352,000	392,000	1,640	62,800	1,010	58,100	6,060	361,000	339,000	395,000
Iron	240,000	2,580	4,200	2,450	467,000	102,000	560,000	236,000	341,000	10,600	4,840	3,420
Lead	28,700	5.46	8.92	1.48	13,900	102,000	36,000	32,900	11,500	5.69	9.26	1.21
Probable Slag	x				x	x	x	x	x			

Notes:

<sup>1</sup>Samples collected by W&M and analyzed by Oxidor Laboratories, LLC by Environmental Protection Agency (EPA) Method 6020.

Sample results in milligrams per kilogram (mg/kg) and reported on a wet weight basis.

**X** = Identifies samples suspected of originating from slag.



**PHOTOGRAPHIC LOG**

**ATTACHMENT A**





**Photo 1: Sample 112-041-SL-01. Identified as probable slag based on test results.**



**Photo 2: Sample 112-041-SL-02. Not identified as slag based on test results.**



**Attachment A**  
**Photographic Log**  
Exide Facility, Stewart Creek  
Frisco, Texas

11/26/2009

Slag Sampling

W&M Project No.: 112.041





**Photo 3: Sample 112-041-SL-03. Not identified as slag based on test results.**



**Photo 4: Sample 112-041-SL-04. Not identified as slag based on test results.**



**Attachment A**  
**Photographic Log**  
Exide Facility, Stewart Creek  
Frisco, Texas

11/26/2009

Slag Sampling

W&M Project No.: 112.041





**Photo 5: Sample 112-041-SL-05. Identified as slag based on test results.**



**Photo 6: Sample 112-041-SL-06. Identified as slag based on test results.**



**Attachment A**  
**Photographic Log**  
Exide Facility, Stewart Creek  
Frisco, Texas

11/26/2009

Slag Sampling

W&M Project No.: 112.041





**Photo 7: Sample 112-041-SL-07. Identified as slag based on test results.**



**Photo 8: Sample 112-041-SL-09. Identified as slag based on test results.**



**Attachment A**  
**Photographic Log**  
Exide Facility, Stewart Creek  
Frisco, Texas

11/26/2009

Slag Sampling

W&M Project No.: 112.041





**Photo 9: Sample 112-041-SL-10. Not identified as slag based on test results.**



**Photo 10: Sample 112-041-SL-11. Not identified as slag based on test results.**



**Attachment A**  
**Photographic Log**  
Exide Facility, Stewart Creek  
Frisco, Texas

11/26/2009

Slag Sampling

W&M Project No.: 112.041





**Photo 11: Sample 112-041-SL-12. Not identified as slag based on test results.**



**Attachment A**  
**Photographic Log**  
Exide Facility, Stewart Creek  
Frisco, Texas

11/26/2009

Slag Sampling

W&M Project No.: 112.041



**LABORATORY  
ANALYTICAL DATA**

**ATTACHMENT B**





OXIDOR Laboratories, LLC



Order ID: 0911235

Date: 11/21/2009

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Saturday, November 21, 2009

W&M Environmental Group, Inc.

Aaron Brewer

906 E. 18th, Suite 100

Plano, TX 75074

Tel: (972) 516-0300 Fax: (972) 516-4145

Re: Project Name: Stewart Creek

Project Number: 112.041.003

Project Location: 7471 5th, Frisco

Oxidor received 12 solid sample(s). The analysis performed were as follows:

<u>Sample</u>	<u>Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Analysis</u>
0911235-001	112-041-01	Solid	11/11/2009 13:10	Calcium, Iron, Lead
0911235-002	112-041-02	Solid	11/11/2009 13:25	Calcium, Iron, Lead
0911235-003	112-041-03	Solid	11/11/2009 13:40	Calcium, Iron, Lead
0911235-004	112-041-04	Solid	11/11/2009 14:05	Calcium, Iron, Lead
0911235-005	112-041-05	Solid	11/11/2009 14:30	Calcium, Iron, Lead
0911235-006	112-041-06	Solid	11/11/2009 15:00	Calcium, Iron, Lead
0911235-007	112-041-07	Solid	11/11/2009 15:20	Calcium, Iron, Lead
0911235-008	112-041-08	Solid	11/11/2009 16:00	Calcium, Iron, Lead
0911235-009	112-041-09	Solid	11/11/2009 16:35	Calcium, Iron, Lead
0911235-010	112-041-10	Solid	11/11/2009 16:50	Calcium, Iron, Lead
0911235-011	112-041-11	Solid	11/11/2009 17:05	Calcium, Iron, Lead
0911235-012	112-041-12	Solid	11/11/2009 17:15	Calcium, Iron, Lead

Respectfully submitted,

Charles Brungardt

President





W&M Environmental Group, Inc.  
Aaron Brewer

## Analytical Report

Project Name: **Stewart Creek**

Customer Sample ID: **112-041-01**

Oxidor Sample ID: 0911235-001

Sample Received: 11/12/2009

Matrix: **Solid**

Sample Collected: **11/11/2009 13:10**

Parameter	MQL	SQL	Result	Units	Date Analyzed	Method	Analyst	Flags
<b>Metals</b>								
<i>Digested by method 3050B on 11/17/09 at 09:55</i>								
Calcium	50	500	<b>21800</b>	mg/Kg	11/19/09 21:39	6020	K.O.	W-1,D-1
Iron	50	50000	<b>240000</b>	mg/Kg	11/18/09 17:47	6020	K.O.	W-1,D-1
Lead	0.5	500	<b>28700</b>	mg/Kg	11/18/09 17:47	6020	K.O.	W-1,D-1





W&M Environmental Group, Inc.  
Aaron Brewer

## Analytical Report

Project Name: **Stewart Creek**

Customer Sample ID: **112-041-02**

Oxidor Sample ID: 0911235-002

Sample Received: 11/12/2009

Matrix: **Solid**

Sample Collected: **11/11/2009 13:25**

Parameter	MQL	SQL	Result	Units	Date Analyzed	Method	Analyst	Flags
<b>Metals</b>								
<i>Digested by method 3050B on 11/17/09 at 09:55</i>								
Calcium	50	5000	<b>401000</b>	mg/Kg	11/19/09 21:56	6020	K.O.	W-1,D-1
Iron	50	50.0	<b>2580</b>	mg/Kg	11/18/09 14:45	6020	K.O.	W-1
Lead	0.5	0.500	<b>5.46</b>	mg/Kg	11/18/09 14:45	6020	K.O.	W-1





W&M Environmental Group, Inc.  
Aaron Brewer

## Analytical Report

Project Name: **Stewart Creek**

Customer Sample ID: **112-041-03**

Oxidor Sample ID: 0911235-003

Sample Received: 11/12/2009

Matrix: **Solid**

Sample Collected: **11/11/2009 13:40**

Parameter	MQL	SQL	Result	Units	Date Analyzed	Method	Analyst	Flags
<b>Metals</b>								
<i>Digested by method 3050B on 11/17/09 at 09:55</i>								
Calcium	50	5000	<b>352000</b>	mg/Kg	11/19/09 22:02	6020	K.O.	W-1,D-1
Iron	50	50.0	<b>4200</b>	mg/Kg	11/18/09 14:51	6020	K.O.	W-1
Lead	0.5	0.500	<b>8.92</b>	mg/Kg	11/18/09 14:51	6020	K.O.	W-1





W&M Environmental Group, Inc.  
Aaron Brewer

## Analytical Report

Project Name: **Stewart Creek**

Customer Sample ID: **112-041-04**

Oxidor Sample ID: 0911235-004

Sample Received: 11/12/2009

Matrix: **Solid**

Sample Collected: **11/11/2009 14:05**

Parameter	MQL	SQL	Result	Units	Date Analyzed	Method	Analyst	Flags
<b>Metals</b>								
<i>Digested by method 3050B on 11/17/09 at 09:55</i>								
Calcium	50	5000	<b>392000</b>	mg/Kg	11/19/09 22:08	6020	K.O.	W-1,D-1
Iron	50	50.0	<b>2450</b>	mg/Kg	11/18/09 14:57	6020	K.O.	W-1
Lead	0.5	0.500	<b>1.48</b>	mg/Kg	11/18/09 14:57	6020	K.O.	W-1





W&M Environmental Group, Inc.  
Aaron Brewer

## Analytical Report

Project Name: **Stewart Creek**

Customer Sample ID: **112-041-05**

Oxidor Sample ID: 0911235-005

Sample Received: 11/12/2009

Matrix: **Solid**

Sample Collected: **11/11/2009 14:30**

Parameter	MQL	SQL	Result	Units	Date Analyzed	Method	Analyst	Flags
<b>Metals</b>								
<i>Digested by method 3050B on 11/17/09 at 09:55</i>								
Calcium	50	1000	<b>1640</b>	mg/Kg	11/19/09 22:20	6020	K.O.	W-1,D-1
Iron	50	50000	<b>467000</b>	mg/Kg	11/18/09 17:53	6020	K.O.	W-1,D-1
Lead	0.5	500	<b>13900</b>	mg/Kg	11/18/09 17:53	6020	K.O.	W-1,D-1





W&M Environmental Group, Inc.  
Aaron Brewer

## Analytical Report

Project Name: **Stewart Creek**

Customer Sample ID: **112-041-06**

Oxidor Sample ID: 0911235-006

Sample Received: 11/12/2009

Matrix: **Solid**

Sample Collected: **11/11/2009 15:00**

Parameter	MQL	SQL	Result	Units	Date Analyzed	Method	Analyst	Flags
<b>Metals</b>								
<i>Digested by method 3050B on 11/17/09 at 09:55</i>								
Calcium	50	5000	<b>62800</b>	mg/Kg	11/19/09 22:26	6020	K.O.	W-1,D-1
Iron	50	5000	<b>102000</b>	mg/Kg	11/18/09 17:41	6020	K.O.	W-1,D-1
Lead	0.5	5000	<b>102000</b>	mg/Kg	11/18/09 18:16	6020	K.O.	W-1,D-1





W&M Environmental Group, Inc.  
Aaron Brewer

## Analytical Report

Project Name: **Stewart Creek**

Customer Sample ID: **112-041-07**

Oxidor Sample ID: 0911235-007

Sample Received: 11/12/2009

Matrix: **Solid**

Sample Collected: **11/11/2009 15:20**

Parameter	MQL	SQL	Result	Units	Date Analyzed	Method	Analyst	Flags
<b>Metals</b>								
<i>Digested by method 3050B on 11/17/09 at 09:55</i>								
Calcium	50	500	<b>1010</b>	mg/Kg	11/19/09 22:32	6020	K.O.	W-1,D-1
Iron	50	50000	<b>560000</b>	mg/Kg	11/18/09 17:59	6020	K.O.	W-1,D-1
Lead	0.5	500	<b>36000</b>	mg/Kg	11/18/09 17:59	6020	K.O.	W-1,D-1





W&M Environmental Group, Inc.  
Aaron Brewer

## Analytical Report

Project Name: **Stewart Creek**

Customer Sample ID: **112-041-08**

Oxidor Sample ID: 0911235-008

Sample Received: 11/12/2009

Matrix: **Solid**

Sample Collected: **11/11/2009 16:00**

Parameter	MQL	SQL	Result	Units	Date Analyzed	Method	Analyst	Flags
<b>Metals</b>								
<i>Digested by method 3050B on 11/17/09 at 09:55</i>								
Calcium	50	500	<b>58100</b>	mg/Kg	11/19/09 22:38	6020	K.O.	W-1,D-1
Iron	50	50000	<b>236000</b>	mg/Kg	11/18/09 18:05	6020	K.O.	W-1,D-1
Lead	0.5	500	<b>32900</b>	mg/Kg	11/18/09 18:05	6020	K.O.	W-1,D-1





W&M Environmental Group, Inc.  
Aaron Brewer

## Analytical Report

Project Name: **Stewart Creek**

Customer Sample ID: **112-041-09**

Oxidor Sample ID: 0911235-009

Sample Received: 11/12/2009

Matrix: **Solid**

Sample Collected: **11/11/2009 16:35**

Parameter	MQL	SQL	Result	Units	Date Analyzed	Method	Analyst	Flags
<b>Metals</b>								
<i>Digested by method 3050B on 11/17/09 at 09:55</i>								
Calcium	50	500	<b>6060</b>	mg/Kg	11/19/09 22:43	6020	K.O.	W-1,D-1
Iron	50	50000	<b>341000</b>	mg/Kg	11/18/09 18:11	6020	K.O.	W-1,D-1
Lead	0.5	500	<b>11500</b>	mg/Kg	11/18/09 18:11	6020	K.O.	W-1,D-1





W&M Environmental Group, Inc.  
Aaron Brewer

## Analytical Report

Project Name: **Stewart Creek**

Customer Sample ID: **112-041-10**

Oxidor Sample ID: 0911235-010

Sample Received: 11/12/2009

Matrix: **Solid**

Sample Collected: **11/11/2009 16:50**

Parameter	MQL	SQL	Result	Units	Date Analyzed	Method	Analyst	Flags
<b>Metals</b>								
<i>Digested by method 3050B on 11/17/09 at 09:55</i>								
Calcium	50	5000	<b>361000</b>	mg/Kg	11/19/09 21:33	6020	K.O.	W-1,D-1
Iron	50	5000	<b>10600</b>	mg/Kg	11/18/09 16:53	6020	K.O.	W-1,D-1
Lead	0.5	0.500	<b>5.69</b>	mg/Kg	11/18/09 14:40	6020	K.O.	W-1





W&M Environmental Group, Inc.  
Aaron Brewer

## Analytical Report

Project Name: **Stewart Creek**

Customer Sample ID: **112-041-11**

Oxidor Sample ID: 0911235-011

Sample Received: 11/12/2009

Matrix: **Solid**

Sample Collected: **11/11/2009 17:05**

Parameter	MQL	SQL	Result	Units	Date Analyzed	Method	Analyst	Flags
<b>Metals</b>								
<i>Digested by method 3050B on 11/17/09 at 09:55</i>								
Calcium	50	5000	<b>339000</b>	mg/Kg	11/19/09 22:49	6020	K.O.	W-1,D-1
Iron	50	50.0	<b>4840</b>	mg/Kg	11/18/09 15:03	6020	K.O.	W-1
Lead	0.5	0.500	<b>9.26</b>	mg/Kg	11/18/09 15:03	6020	K.O.	W-1





OXIDOR Laboratories, LLC



Order ID: 0911235

Date: 11/21/2009

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W&amp;M Environmental Group, Inc.

Aaron Brewer

## Analytical Report

Project Name: **Stewart Creek**Customer Sample ID: **112-041-12**

Oxidor Sample ID: 0911235-012

Sample Received: 11/12/2009

Matrix: **Solid**Sample Collected: **11/11/2009 17:15**

Parameter	MQL	SQL	Result	Units	Date Analyzed	Method	Analyst	Flags
<b>Metals</b>								
<i>Digested by method 3050B on 11/17/09 at 09:55</i>								
Calcium	50	5000	<b>395000</b>	mg/Kg	11/19/09 23:07	6020	K.O.	W-1,D-1
Iron	50	50.0	<b>3420</b>	mg/Kg	11/18/09 15:20	6020	K.O.	W-1
Lead	0.5	0.500	<b>1.21</b>	mg/Kg	11/18/09 15:20	6020	K.O.	W-1





W&amp;M Environmental Group, Inc.

Aaron Brewer

**Sample Cross Reference**Project Name: **Stewart Creek**

Customer ID:	Lab ID:	Test	Method	QCBatchID:
112-041-01	0911235-001	Iron	6020	META_01727_S
		Lead	6020	META_01727_S
		Calcium	6020	META_02127_S
112-041-02	0911235-002	Iron	6020	META_01727_S
		Lead	6020	META_01727_S
		Calcium	6020	META_02127_S
112-041-03	0911235-003	Iron	6020	META_01727_S
		Lead	6020	META_01727_S
		Calcium	6020	META_02127_S
112-041-04	0911235-004	Iron	6020	META_01727_S
		Lead	6020	META_01727_S
		Calcium	6020	META_02127_S
112-041-05	0911235-005	Iron	6020	META_01727_S
		Lead	6020	META_01727_S
		Calcium	6020	META_02127_S
112-041-06	0911235-006	Lead	6020	META_01727_S
		Iron	6020	META_01727_S
		Calcium	6020	META_02127_S
112-041-07	0911235-007	Iron	6020	META_01727_S
		Lead	6020	META_01727_S
		Calcium	6020	META_02127_S
112-041-08	0911235-008	Iron	6020	META_01727_S
		Lead	6020	META_01727_S
		Calcium	6020	META_02127_S
112-041-09	0911235-009	Iron	6020	META_01727_S
		Lead	6020	META_01727_S
		Calcium	6020	META_02127_S
112-041-10	0911235-010	Iron	6020	META_01727_S
		Lead	6020	META_01727_S
		Calcium	6020	META_02127_S
112-041-11	0911235-011	Iron	6020	META_01727_S
		Lead	6020	META_01727_S
		Calcium	6020	META_02127_S
112-041-12	0911235-012	Lead	6020	META_01727_S
		Iron	6020	META_01727_S
		Calcium	6020	META_02127_S





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 Aaron Brewer

## QC Summary

Project Name: **Stewart Creek**

QC Type	Parameter	Result	Reference Value	Spike Conc	Rec	Rec Limits	RPD	RPD Limits	Flags
<b>QCBatchID META_01727_S</b>									
Blank	Iron	ND mg/Kg							
	Lead	ND mg/Kg							
LCS	Iron	11.2 mg/L		11 mg/L	102%	85-115%			
	Lead	10.3 mg/L		11 mg/L	94%	85-115%			
LCSD	Iron	11.3 mg/L		11 mg/L	103%	85-115%	1.2%	0-20%	
	Lead	10.4 mg/L		11 mg/L	95%	85-115%	1.0%	0-20%	
MS	Iron	7180 mg/Kg	10600 mg/Kg	550 mg/Kg	%	80-120%			Q-11
	Lead	529 mg/Kg	5.69 mg/Kg	550 mg/Kg	95%	80-120%			
MSD	Iron	7060 mg/Kg	10600 mg/Kg	550 mg/Kg	%	80-120%			Q-11
	Lead	516 mg/Kg	5.69 mg/Kg	550 mg/Kg	93%	80-120%	2.5%	0-20%	
<b>QCBatchID META_02127_S</b>									
Blank	Calcium	ND mg/Kg							
LCS	Calcium	11.1 mg/L		11 mg/L	101%	85-115%			
LCSD	Calcium	11.3 mg/L		11 mg/L	103%	85-115%	1.8%	0-20%	
MS	Calcium	377000 mg/Kg	361000 mg/Kg	550 mg/Kg	%	80-120%			Q-11
MSD	Calcium	318000 mg/Kg	361000 mg/Kg	550 mg/Kg	%	80-120%			Q-11





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## Case Narrative

Project Name: **Stewart Creek**

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D-1	Elevated reporting limit(s) due to dilution. Dilution resulted from sample matrix interference, high target analyte(s), high non-target analyte(s) or a combination thereof.
Q-11	Recovery is not reported due to the high concentration of analyte(s) within the parent sample relative to the spike concentration.
W-1	Result reported on wet weight basis.
ppm	Parts per million = mg/Kg or mg/L
ppb	Parts per billion = ug/Kg or ug/L
MQL	Method quantitation limit
SDL	Sample detection limit (reflects any laboratory adjustments made to the sample during analysis such as dry weight or dilutions)
SQL	Sample quantitation limit (reflects any laboratory adjustments made to the sample during analysis such as dry weight or dilution)
ND	Analyte not detected at or above SQL
LCS/LCSD	Laboratory control spike / Laboratory control spike duplicate
MS/MSD	Matrix spike / Matrix spike duplicate
RPD	Relative percent difference
Sub	Analysis performed by subcontract laboratory

*Solid sample results reported on a dry weight basis for all applicable analysis, unless otherwise noted. Dry weight calculations based upon % solids obtained as outlined in EPA method 5035 section 7.5*

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Oxidor Laboratories, LLC certifies to the best of its knowledge that all results contained in this report are consistent with the National Environmental Laboratory Accreditation Program, except where otherwise noted.





W&M Environmental Group, Inc.  
Aaron Brewer

## Sample Preservation Verification

Project Name: **Stewart Creek**

Receipt temp: **5.4 °C on Ice**

All applicable VOA's received free of headspace: **N/A**

Receipt method: **Client**

Custody seal intact: **Not Present**

All samples / labels received intact: **Yes**

Customer Sample ID: **112-041-01**

Collected By: **Steven Furlough**

Oxidior Sample ID: **0911235-001**

Collector Affiliation: **W&M Environmental Group, Inc.**

Collected: **11/11/09 13:10**

Matrix: **Solid**

<u>Bottle Type</u>	<u>Count</u>	<u>Collection Method</u>	<u>Parts / Interval</u>	<u>Indicated Preservation</u>	<u>pH</u>
4 oz Glass Jar	1	Grab		Temp	-

Customer Sample ID: **112-041-02**

Collected By: **Steven Furlough**

Oxidior Sample ID: **0911235-002**

Collector Affiliation: **W&M Environmental Group, Inc.**

Collected: **11/11/09 13:25**

Matrix: **Solid**

<u>Bottle Type</u>	<u>Count</u>	<u>Collection Method</u>	<u>Parts / Interval</u>	<u>Indicated Preservation</u>	<u>pH</u>
4 oz Glass Jar	1	Grab		Temp	-

Customer Sample ID: **112-041-03**

Collected By: **Steven Furlough**

Oxidior Sample ID: **0911235-003**

Collector Affiliation: **W&M Environmental Group, Inc.**

Collected: **11/11/09 13:40**

Matrix: **Solid**

<u>Bottle Type</u>	<u>Count</u>	<u>Collection Method</u>	<u>Parts / Interval</u>	<u>Indicated Preservation</u>	<u>pH</u>
4 oz Glass Jar	1	Grab		Temp	-

Customer Sample ID: **112-041-04**

Collected By: **Steven Furlough**

Oxidior Sample ID: **0911235-004**

Collector Affiliation: **W&M Environmental Group, Inc.**

Collected: **11/11/09 14:05**

Matrix: **Solid**

<u>Bottle Type</u>	<u>Count</u>	<u>Collection Method</u>	<u>Parts / Interval</u>	<u>Indicated Preservation</u>	<u>pH</u>
4 oz Glass Jar	1	Grab		Temp	-

Customer Sample ID: **112-041-05**

Collected By: **Steven Furlough**

Oxidior Sample ID: **0911235-005**

Collector Affiliation: **W&M Environmental Group, Inc.**

Collected: **11/11/09 14:30**

Matrix: **Solid**

<u>Bottle Type</u>	<u>Count</u>	<u>Collection Method</u>	<u>Parts / Interval</u>	<u>Indicated Preservation</u>	<u>pH</u>
4 oz Glass Jar	1	Grab		Temp	-





W&M Environmental Group, Inc.  
Aaron Brewer

## Sample Preservation Verification

Project Name: **Stewart Creek**

Customer Sample ID: **112-041-06**

Oxidior Sample ID: **0911235-006**

Collected: **11/11/09 15:00**

Collected By: **Steven Furlough**

Collector Affiliation: **W&M Environmental Group, Inc.**

Matrix: **Solid**

<u>Bottle Type</u>	<u>Count</u>	<u>Collection Method</u>	<u>Parts / Interval</u>	<u>Indicated Preservation</u>	<u>pH</u>
4 oz Glass Jar	1	Grab		Temp	-

Customer Sample ID: **112-041-07**

Oxidior Sample ID: **0911235-007**

Collected: **11/11/09 15:20**

Collected By: **Steven Furlough**

Collector Affiliation: **W&M Environmental Group, Inc.**

Matrix: **Solid**

<u>Bottle Type</u>	<u>Count</u>	<u>Collection Method</u>	<u>Parts / Interval</u>	<u>Indicated Preservation</u>	<u>pH</u>
4 oz Glass Jar	1	Grab		Temp	-

Customer Sample ID: **112-041-08**

Oxidior Sample ID: **0911235-008**

Collected: **11/11/09 16:00**

Collected By: **Steven Furlough**

Collector Affiliation: **W&M Environmental Group, Inc.**

Matrix: **Solid**

<u>Bottle Type</u>	<u>Count</u>	<u>Collection Method</u>	<u>Parts / Interval</u>	<u>Indicated Preservation</u>	<u>pH</u>
4 oz Glass Jar	1	Grab		Temp	-

Customer Sample ID: **112-041-09**

Oxidior Sample ID: **0911235-009**

Collected: **11/11/09 16:35**

Collected By: **Steven Furlough**

Collector Affiliation: **W&M Environmental Group, Inc.**

Matrix: **Solid**

<u>Bottle Type</u>	<u>Count</u>	<u>Collection Method</u>	<u>Parts / Interval</u>	<u>Indicated Preservation</u>	<u>pH</u>
4 oz Glass Jar	1	Grab		Temp	-

Customer Sample ID: **112-041-10**

Oxidior Sample ID: **0911235-010**

Collected: **11/11/09 16:50**

Collected By: **Steven Furlough**

Collector Affiliation: **W&M Environmental Group, Inc.**

Matrix: **Solid**

<u>Bottle Type</u>	<u>Count</u>	<u>Collection Method</u>	<u>Parts / Interval</u>	<u>Indicated Preservation</u>	<u>pH</u>
4 oz Glass Jar	1	Grab		Temp	-

Customer Sample ID: **112-041-11**

Oxidior Sample ID: **0911235-011**

Collected: **11/11/09 17:05**

Collected By: **Steven Furlough**

Collector Affiliation: **W&M Environmental Group, Inc.**

Matrix: **Solid**

<u>Bottle Type</u>	<u>Count</u>	<u>Collection Method</u>	<u>Parts / Interval</u>	<u>Indicated Preservation</u>	<u>pH</u>
4 oz Glass Jar	1	Grab		Temp	-





W&M Environmental Group, Inc.  
Aaron Brewer

## Sample Preservation Verification

Project Name: **Stewart Creek**

Customer Sample ID: **112-041-12**

Collected By: **Steven Furlough**

Oxidor Sample ID: **0911235-012**

Collector Affiliation: **W&M Environmental Group, Inc.**

Collected: **11/11/09 17:15**

Matrix: **Solid**

<u>Bottle Type</u>	<u>Count</u>	<u>Collection Method</u>	<u>Parts / Interval</u>	<u>Indicated Preservation</u>	<u>pH</u>
4 oz Glass Jar	1	Grab		Temp	-

Sample conditions at time of receipt at laboratory verified in part or in whole by:

T.M.





## Chain of Custody

PROJECT DESCRIPTION: **Stewart Creek**

OXIDOR CORPORATION  
 Environmental Laboratories  
 1825 East Plano Parkway, Suite 160  
 Plano, TX 75074-8570  
 P: (972) 424-6422 F: (972) 424-6508  
 customerservice@oxidor.com



## Chain of Custody Record

Page 1 of 1

<b>Report Information</b>		<b>Project Information</b>	
Company Name <u>W+M</u>		Requested Turn Around Time (1 Day and ASAP must be verified with lab) <input checked="" type="checkbox"/> 7-10 Days <input type="checkbox"/> 5-7 Days <input type="checkbox"/> 3 Days <input type="checkbox"/> 2 Days <input type="checkbox"/> 1 Day <input type="checkbox"/> ASAP	
Address <u>906 E 18th</u>		Project Name <u>Stewart Creek</u>	
City <u>Plano</u>	State <u>TX</u> Zip <u>75074</u>	Project Location <u>7471 5th Frisco</u>	
Contact Name <u>Aaron Brewer</u>		Project # <u>112.041.003</u>	Quote # <u></u> PO # <u></u>
Contact Email <u>abrewer@w+m.com</u>		Sampler Name <u>Steven Furlough</u> Affiliation <u>W+M</u>	
Phone <u>(512) 501-4055</u> Fax <u>(512) 493-9693</u>		Sampler Signature <u>[Signature]</u>	
<b>Shipping Information (Only if Different from above)</b>			
Company Name <u>SAME</u>		Matrix Codes <input type="checkbox"/> L - Liquid <input type="checkbox"/> S - Solid <input type="checkbox"/> W - Wipes <input type="checkbox"/> A - Air	
Address <u>SAME</u>		Preservation Codes 1 - None 4 - HCl 2 - HNO <sub>3</sub> 5 - NaOH 3 - H <sub>2</sub> SO <sub>4</sub> 6 - Ice 7 - Other <u></u>	
City <u>Plano</u>	State <u>TX</u> Zip <u>75074</u>	Special Instructions <u></u>	
Contact Name <u></u>		Container Codes <input type="checkbox"/> P - Plastic <input type="checkbox"/> G - Glass <input type="checkbox"/> O - Other <u></u>	
Phone <u></u> Fax <u></u>		<b>Requested Analysis</b>	

OXIDOR use only OXIDOR Order ID:	Customer Sample ID	Sample Info		Matrix	# of Containers	Container Type	Pres Code	(C)ump / (G)lass	Parts / Interval	Hold	Iron	Lead	Calcium	Total Solids / Dry Weight	Laboratory Review Checklist	Chromatograms / Data Pages
		Date	Time													
0911235																
-001	112-041-01	11-11-09	13:10	S	1	G	G	G			X	X			X	
-002	112-041-02		13:25	S	1	G	G	G			X	X			X	
-003	112-041-03		13:40	S	1	G	G	G			X	X			X	
-004	112-041-04		14:05	S	1	G	G	G			X	X			X	
-005	112-041-05		14:30	S	1	G	G	G			X	X			X	
-006	112-041-06		15:00	S	1	G	G	G			X	X			X	
-007	112-041-07		15:20	S	1	G	G	G			X	X			X	
-008	112-041-08		16:00	S	1	G	G	G			X	X			X	
-009	112-041-09		16:35	S	1	G	G	G			X	X			X	
-010	112-041-10		16:50	S	1	G	G	G			X	X			X	
-011	112-041-11		17:05	S	1	G	G	G			X	X			X	
-012	112-041-12	11-11-09	17:15	S	1	G	G	G			X	X			X	

Relinquished by <u>[Signature]</u>	Affiliation <u>W+M</u> Date <u>11-12-09</u> Time <u>11:40</u>	Received by <u>[Signature]</u>	Affiliation <u>W+M</u> Date <u>11-12-09</u> Time <u>11:40</u>
Relinquished by <u></u>	Affiliation <u></u> Date <u></u> Time <u></u>	Received by <u></u>	Affiliation <u></u> Date <u></u> Time <u></u>
Relinquished by <u></u>	Affiliation <u></u> Date <u></u> Time <u></u>	Received by <u></u>	Affiliation <u></u> Date <u></u> Time <u></u>
Relinquished by <u></u>	Affiliation <u></u> Date <u></u> Time <u></u>	Received for OXIDOR by <u>[Signature]</u>	Date <u>11/12/09</u> Time <u>11:40</u>





March 28, 2013

Matt Love, Environmental Manager  
Exide Technologies, Inc.  
7471 South 5<sup>th</sup> Street  
Frisco, Texas 75034

RE: Inspection of Facility Operating Areas  
Exide Facility  
7471 South 5<sup>th</sup> Street  
Frisco, Texas  
W&M Project No. 112.072

Dear Mr. Love:

This letter summarizes the observations resulting from visual inspections for the presence of exposed slag or plastic battery casings at Exide Technologies' plant located in Frisco, Texas (refer to Location Plan, **Figure 1**). The inspections were completed at various times from May 2009 to March 2013, and focused on portions of the property that have been designated as facility operating areas, as described below.

In May/June 2009, W&M performed a visual assessment for the presence of slag within a segment of Stewart Creek located downstream (west) from the principal operating areas at the Site. In December 2011, W&M conducted a visual inspection for battery case fragments from crushed lead-acid batteries and slag fragments in the two historic disposal areas located on the north and south portions of the main Exide facility in Frisco, Texas. In March 2013, W&M completed additional inspections on the remaining Exide facility operating areas including the "RCRA Permitted Area", the area around the operating Class 2 non-hazardous waste landfill in the northern portion of the Site, and a wooded area between the two (refer to Site layout, **Figure 2**). The inspections included recording the Global Positioning System (GPS) coordinates of any such material identified documenting observations regarding each location, and determining the extent of erosion in the disposal areas, if present.

This letter describes the methodology used and results from both the December 2011 and March 2013 inspections. This report includes the findings of the December 2011 inspection (which were previously reported in W&M's report titled "Suspect Slag Sampling Report" dated March 28, 2011 and "North and South Disposal Area Evaluation" dated December 28, 2011).

## BACKGROUND AND PROJECT SCOPE

Exide Technologies' predecessors reportedly placed treated and untreated lead slag (slag), battery case fragments from crushed lead-acid batteries, and similar debris in areas located on the north and south portions of the main plant facility. The disposal areas no longer receive waste materials and are capped with soil and vegetative cover. In addition to these two disposal areas, a gun range was formerly operated along the western edge of the south disposal area that utilized an earthen berm as a bullet backstop.



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In 1993, an addendum to the 1991 RCRA Facility Investigation (RFI) was completed to delineate the boundaries of each disposal area. **Figure 3** outlines the approximate boundaries of the north disposal area as determined in that report, as well as two “slag landfill” areas located to the northwest. The south disposal area as documented in the 1993 Addendum to the RFI is also depicted on **Figure 3**, along with the west adjacent gun range berm.

In 2011, Exide engaged W&M to assess the condition of the soil cap in each disposal area, note areas of soil erosion and/or exposed waste materials, and note any waste materials located outside of the documented disposal areas. For purposes of this evaluation, the three fill areas in the northern portion of the plant are designated collectively as the north disposal area (NDA) and the fill area south of the main plant is referred to as the south disposal area (SDA). In 2013, Exide engaged W&M to assess the remaining Exide facility operating area. The remaining areas included the area of the operating Class 2 non-hazardous waste landfill, and the densely vegetated area around the northern tributary to Stewart Creek. Stewart Creek was inspected again in 2013. This report summarizes field observations made by W&M while inspecting each area.

Photographs of some of the materials and features observed are provided in **Attachment A**.

## CAP INSPECTION

Using figures completed for Exide’s predecessor (GNB Incorporated drawing number 495-171 April 9, 1991, and drawing number 494-170, April 9, 1991) and figures from Exide’s Storm Water Pollution Prevention Plan (provided by W&M), each disposal area was systematically walked to document evidence of slag or battery case fragments, and make notations as to their location and quantity in each area. The assessment consisted of visual, on the ground observations only and did not include physical digging or intrusive investigations. Features and materials observed were marked with flags and/or documented using a Trimble GeoXT GPS receiver. Each feature has been assigned a unique designation and number along with its geographic coordinates, and the locations are summarized in **Table 1**.

### South Disposal Area

Beginning at the northeast extent of the SDA, W&M staff traversed the disposal area along north-south transects spaced at intervals of 75 feet or less. W&M staff observed cracks in the soil caused by drought conditions, principally in the western lobe of the disposal area as well as outside of the disposal area. An area of erosion covering approximately 500 square feet was observed near the northeastern extent of the documented disposal area. Neither slag nor battery case fragments were observed within the eroded area. An area of surface depression was noted in the central portion of the SDA, however no evidence of slag or battery case fragments was noted.

**Figure 4** displays the surface features observed while canvassing the SDA. Slag material and battery case fragments were only observed near three small animal burrows within the SDA (as documented in **Photo 3** and **Photo 4**). The slag and battery case fragments observed near the burrowing entrances had an approximate diameter of one to five inches.

### North Disposal Area

Using procedures similar to those used while inspecting the SDA, W&M staff inspected the cap within the three filled areas comprising the NDA. As with the SDA, evidence of vegetative heat stress and soil desiccation were noted in the NDA. Exposed slag or battery case fragments were observed in materials storage areas and within areas of heavy vehicular traffic, including a few locations on or north of the



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unpaved roadway that mirrors the northern boundary of the NDA, and in the southern portions of the NDA. Materials within the southern area of the NDA area included battery case fragments and 4-inch to 6-inch diameter pieces of untreated slag fragments. Slag fragments were observed near a storm water drainage pipe leading under the paved roadway adjoining the blast furnace building. The mounded section of the NDA (slag landfill area), located just south of the northern tributary to Stewart Creek and west of the paved roadway, was observed to have isolated areas of slag fragments atop the mound and along the western slope. The steeper, south face of the mound was observed to have poor vegetative cover, but no exposed slag or battery case fragments were observed.

**Figure 5** depicts the areas where battery case and slag fragments were observed in the NDA.

## **OBSERVATION OF MATERIALS OUTSIDE OF DISPOSAL AREAS**

In addition to noting the conditions within the disposal areas, W&M observed slag or battery case fragments outside of the disposal areas. The following paragraphs document those locations as well as materials exposed within the earthen berm used as a firing range backstop west of the SDA.

### **South Disposal Area and Gun Range Berm**

The firing range berm located west of the SDA was observed to have small to moderate-sized woody vegetation along its crest. Leaves covered much of the slope, obscuring observations in some areas. Fragmented bullets (**Photo 11**) and occasional pieces of battery case fragments (dime-sized) were observed throughout the bare, eastern face of the berm. It is possible that the berm was constructed by scraping and mounding of fill material, and will contain slag and battery case fragments. Large fragments of slag were observed near the southern end of the berm which terminates at the outcrop of weathered limestone located south of the disposal area. As the outcrop extends eastward it was noted to widen from a narrow strip, less than 10 feet wide, to a feature 100 feet wide. Within the corner formed by the berm and limestone, W&M observed multiple clusters of battery case and slag fragments from 4 inches to 18 inches in diameter. Individual, smaller fragments of untreated slag were observed along the northern face of the limestone outcrop, extending from the intersection of the outcrop and the berm eastward 100 feet.

A cluster of 4-inch to 18-inch diameter fragments of slag was noted south of the SDA within the trees located north of the limestone outcrop. Some battery case fragments and dime-sized slag fragments were observed in the broadest portion of the exposed limestone, and appeared to be surficial in nature (note this area may also contain fragments from shooting clays that have the initial appearance of battery case fragments). Additional large slag fragments were observed within the tree line east of the disposal area, while discrete and isolated dime-sized slag and battery case fragments were observed in the dense vegetation further east of the SDA. These smaller fragments may have been transported away from the disposal area through historic erosion, since these areas appear to be topographically lower. Finally, a cluster of 12-inch to 18-inch diameter fragments of slag were observed within the small group of trees immediately north of the SDA.

**Figure 4** notes the location of slag, battery case fragments observed within and around the SDA.

### **North Disposal Area Perimeter**

North of the main plant, untreated, exposed slag fragments were observed outside the southeastern end of the mapped disposal area. The slag was observed in a generally linear orientation extending westward between the southern NDA boundary and the rail line, terminating at the driveway leading to the blast furnace building. Individual, 4-inch to 6-inch pieces of slag fragments were observed within and along



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the rail line north of the battery receiving/storage building and to the northwest (as documented in **Photo 10**). The dense vegetation located along the northern tributary to Stewart Creek, northwest of the disposal areas was noted to contain a few areas with 12-inch sized fragments of slag. Slightly smaller fragments of slag and battery cases were observed at isolated locations in the dense vegetation northeast of the NDA.

### **Stewart Creek Area**

W&M inspected the entire Stewart Creek area inside the Exide operating area. No slag or battery case fragments were observed in the eastern portion of the creek; however, slag fragments were observed in the west portion of the creek. Several dome shaped 18-inch diameter fragments from kettles used in the smelting process (commonly referred to as “buttons”) were observed in the creek bank and bed. Also small 4-inch to 8-inch individual slag fragments were observed in the far northwest extent of the creek, refer to **Figure 6**.

### **Crystallizer Plant Road**

W&M inspected an area along Crystallizer Plant Road west of the Crystallizer Plant where a small quantity of battery case fragments had been noted in a Phase I ESA Report prepared by Southwest Geosciences, Inc. Only one battery case fragment was observed, but the area appeared to be more overgrown then when the fragments were originally observed. This area will be included within the overall plan for addressing casing fragments and slag at the Site.

### **North Disposal Area Perimeter**

North of the NDA, a densely vegetated area was observed around the northern tributary of Stewart Creek. No slag or battery case fragments were observed in this area except in the far southeast portion located near the Frisco Fire training building, refer to **Figure 7**. A few fragments of slag were observed just north of the Frisco Fire training building.

### **Operating Class 2 Non-Hazardous Waste Landfill Area**

The operating Class 2 Non-Hazardous Waste Landfill observations identified very minimal intermittent slag fragments across the southern portion of the landfill area. Slag sizes observed were approximately 3 to 6 inches in diameter. No other slag or battery case fragments were observed in the landfill area; refer to **Figure 7**.

## **CONCLUSIONS**

W&M’s inspection has identified minimal areas of slag or battery case fragments in the SDA. Generally that which was observed was associated with material brought to the surface by animal burrowing. Areas to the south and east of the designated SDA contain exposed materials, as does the gun range berm located immediately to the west. Intermittent and isolated observations of battery case fragments and small slag fragments were noted in areas to the north of the SDA and within wooded and overgrown areas east of the SDA. These minor occurrences may be associated, at least in part, to historic erosion from filled areas.



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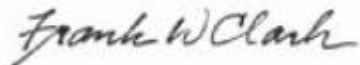
Areas of slag fragments were observed within the surface of the NDA, particularly near materials storage areas and within areas of heavy vehicular traffic in the southern portions of the NDA. Slag fragments were also noted southeast of the NDA boundary and along the rail line

The remaining areas inspected were largely clear of slag fragments except for a few areas. Slag fragments were observed along the bank of Stewart Creek, at discrete locations near the Frisco Fire training building south of the northern tributary to Stewart Creek, along a road west of the Crystallizer Plant, and in the southern portion of the operating Class 2 Non-Hazardous Waste landfill area.

W&M's evaluation was based solely on a visual assessment of exposed material, and the thickness and lateral extent of the slag and battery case fragments at each location identified has not been defined. It is possible that many observations of surficial material represent isolated conditions that can be managed with minimal effort; other areas will warrant some additional intrusive investigations to define the depth and lateral extent of the slag and battery case fragments.

This report was prepared for the sole use of Exide Technologies by employing generally accepted methods and customary practices of the engineering profession. W&M appreciates the opportunity to be of service to you on this project. If you have any questions or need additional information, please contact Frank Clark, P.E. at 972-509-9611.

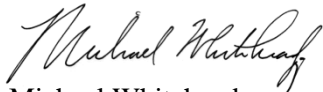
Very truly yours,  
**W&M ENVIRONMENTAL GROUP, INC.**



Frank W. Clark, P.E., P.G.  
Senior Consultant



Brent Vollmar  
Environmental Scientist



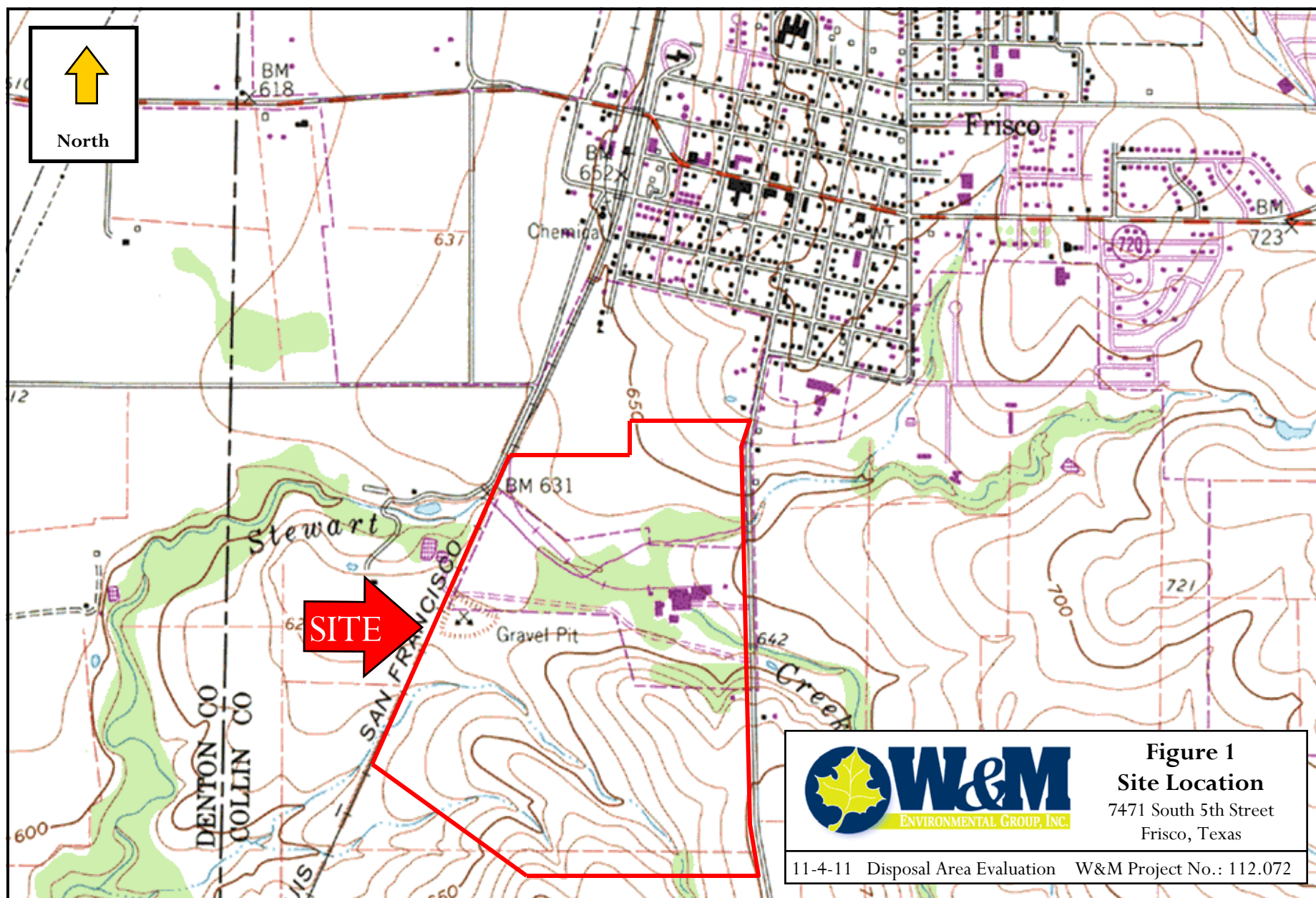
Michael Whitehead  
Senior Reviewer

Figures, Tables, Attachments



**FIGURES**



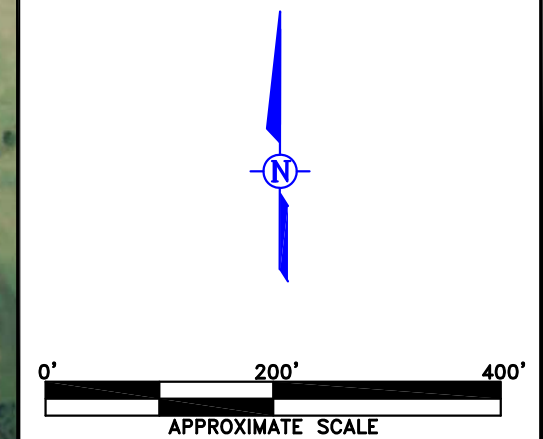






Legend

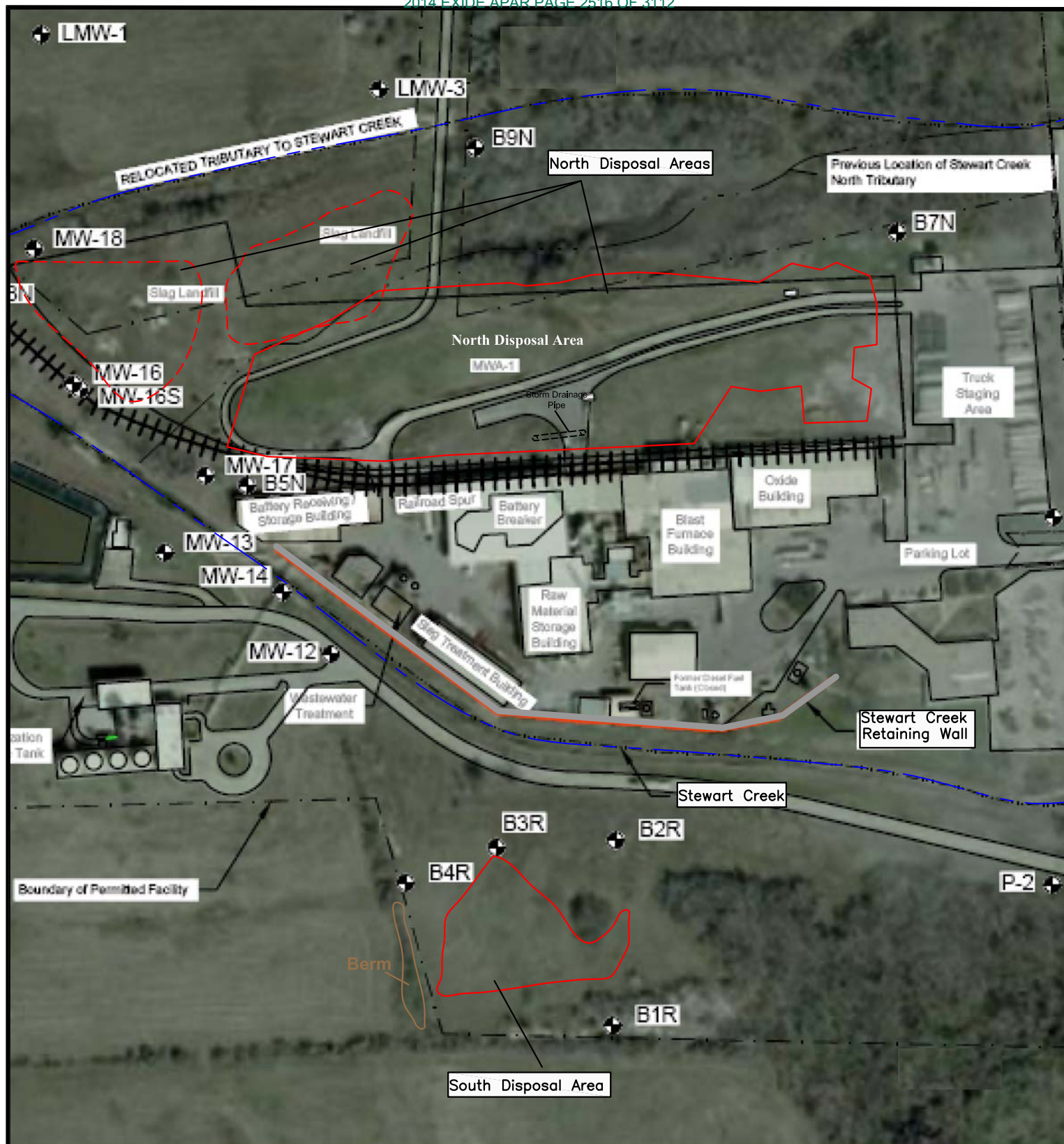
----- Interim Action Boundary (Approximate)



**Figure 2**  
**Site Map**  
 7471 South 5th Street  
 Frisco, Texas







## Legend



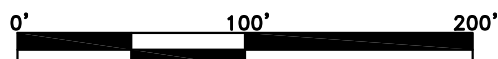
Mapped Disposal Area Boundaries per 1993 RFI



Slag Disposal Areas per Waste Summary of Investigations in Waste Management Areas - July 2011



Monitoring Well/Boring Locations from RFI



APPROXIMATE SCALE



**Figure 3**  
**North and South Disposal Areas**  
 7471 South 5th Street  
 Frisco, Texas



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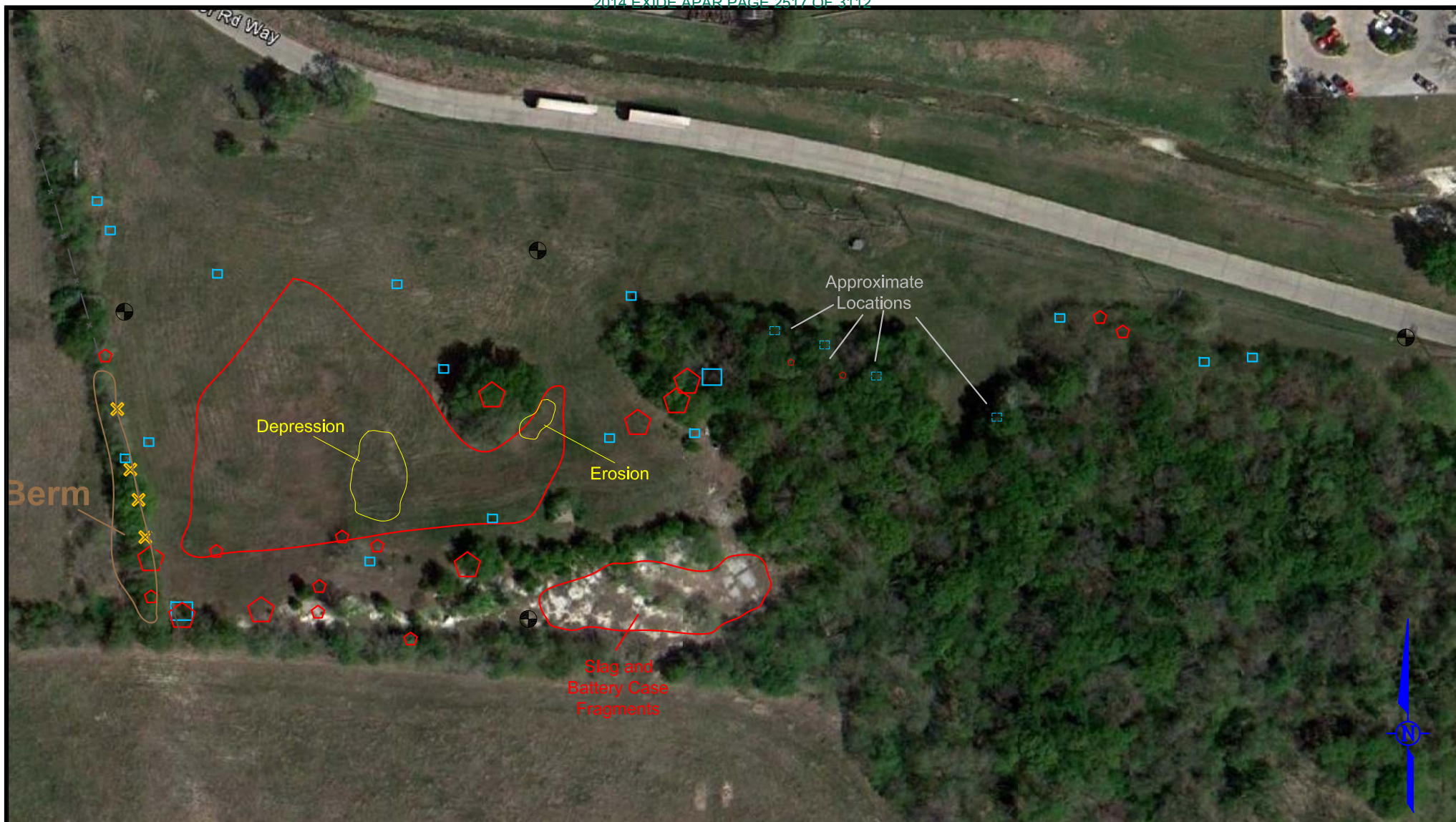
10/25/11

W&amp;M Project No. 112.072

Disposal Area Investigation

Drawn by: SDF



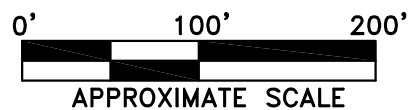


## Legend

- ⬠ Individual Fragments of Slag Material
- Individual/Small Clusters of Battery Case Fragments
- ⬠ Clusters/Large Fragments of Slag Material
- Battery Case Fragments
- ✕ Bullet



Mapped Disposal Area Boundary per 1993 RFI



**Figure 4**  
**South Disposal Area**  
 7471 South 5th Street  
 Frisco, Texas







## Legend

- ◊ Individual Fragments of Slag Material
- Individual/Small Clusters of Battery Case Fragments
- ⬠ Clusters/Large Fragments of Slag Material
- Battery Case Fragments



Mapped Disposal Area Boundary per 1993 RFI



Slag Disposal Areas per Waste Summary of Investigations In Waste Management Areas – July 2011

0' 100' 200'



APPROXIMATE SCALE





**Figure 5**  
**North Disposal Area**  
 7471 South 5th Street  
 Frisco, Texas








## Legend

-  Individual Fragments of Slag Material
-  Individual/Small Clusters of Battery Case Fragments
-  Clusters/Large Fragments of Slag Material
-  Battery Case Fragments

0' 125' 250'



APPROXIMATE SCALE



**Figure 6**  
**Stewart Creek**  
 7471 South 5th Street  
 Frisco, Texas

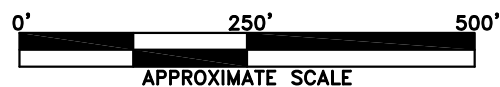






## Legend

- Individual Fragments of Slag Material
- Individual/Small Clusters of Battery Case Fragments
- Clusters/Large Fragments of Slag Material
- Battery Case Fragments



**Figure 7**  
**Operating Class 2 Non-Hazardous  
Waste Landfill Area**

7471 South 5th Street  
Frisco, Texas



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3/22/13

W&M Project No. 112.072

Disposal Area Investigation

Drawn by: BV



**TABLES**



**TABLE 1**  
**Locations of Surface Slag & Battery Case Fragments**  
**Exide Operating Areas**

*Exide Technologies*  
*7471 South 5th Street*  
*Frisco, Texas*

	Material Name	Latitude	Longitude	Description	How to Address	Addressed (Y/N)
	<b>Areas of Observed Surface Slag</b>					
South Disposal Area	Slag-1	33.139033°	-96.829056°	Individual surface slag fragment		
	Slag-2	33.138589°	-96.828904°	Individual surface slag fragment		
	Slag-3	33.138511°	-96.828881°	Individual surface slag fragment		
	Slag-4	33.138499°	-96.828851°	Individual surface slag fragment		
	Slag-5	33.138475°	-96.828783°	Individual surface slag fragment		
	Slag-6	33.138481°	-96.828743°	Individual surface slag fragment		
	Slag-7	33.138488°	-96.828612°	Individual surface slag fragment		
	Slag-8	33.138526°	-96.828473°	Individual surface slag fragment		
	Slag-9	33.138499°	-96.828468°	Individual surface slag fragment		
	Slag-10	33.138431°	-96.828235°	Individual surface slag fragment		
	Slag-11	33.138611°	-96.828736°	Individual surface slag fragment		
	Slag-12	33.138656°	-96.828420°	Individual surface slag fragment		
	Slag-13	33.138618°	-96.828328°	Individual surface slag fragment		
	Slag-14	33.138595°	-96.828208°	Individual surface slag fragment		
	Slag-15	33.138580°	-96.828116°	Individual surface slag fragment		
	Slag-16	33.138585°	-96.828041°	Individual surface slag fragment		
	Slag-17	33.138940°	-96.828070°	Individual surface slag fragment		
	Slag-18	33.138961°	-96.828002°	Individual surface slag fragment		
	Slag-19	33.138882°	-96.827664°	Individual surface slag fragment		
	Slag-20	33.138936°	-96.827553°	Individual surface slag fragment		
	Slag-21	33.138971°	-96.827526°	Individual surface slag fragment		
	Slag-22	33.139102°	-96.826434°	Individual surface slag fragment		
	Slag-23	33.139065°	-96.826381°	Individual surface slag fragment		
	Slag-24	33.138985°	-96.827132°	Individual surface slag fragment		
	Slag-25	33.139022°	-96.827278°	Individual surface slag fragment		
North Disposal Area	Slag-26	33.141034°	-96.826827°	Individual surface slag fragment		
	Slag-27	33.141085°	-96.826856°	Individual surface slag fragment		
	Slag-28	33.141084°	-96.827085°	Individual surface slag fragment		
	Slag-29	33.141092°	-96.827148°	Individual surface slag fragment		
	Slag-30	33.141075°	-96.827229°	Individual surface slag fragment		
	Slag-31	33.141065°	-96.827259°	Individual surface slag fragment		
	Slag-32	33.141055°	-96.827296°	Individual surface slag fragment		
	Slag-33	33.141016°	-96.827307°	Individual surface slag fragment		
	Slag-34	33.141063°	-96.827364°	Individual surface slag fragment		
	Slag-35	33.141001°	-96.827809°	Individual surface slag fragment		
	Slag-36	33.140974°	-96.827894°	Individual surface slag fragment		
	Slag-37	33.141050°	-96.827946°	Individual surface slag fragment		
	Slag-38	33.141109°	-96.827876°	Individual surface slag fragment		
	Slag-39	33.141066°	-96.828216°	Individual surface slag fragment		
	Slag-40	33.141107°	-96.828224°	Individual surface slag fragment		
	Slag-41	33.141120°	-96.828371°	Individual surface slag fragment		
	Slag-42	33.141217°	-96.828494°	Individual surface slag fragment		
	Slag-43	33.141180°	-96.828714°	Individual surface slag fragment		
	Slag-44	33.141103°	-96.828698°	Individual surface slag fragment		
	Slag-45	33.141067°	-96.828925°	Individual surface slag fragment		
	Slag-46	33.140940°	-96.829377°	Individual surface slag fragment		
	Slag-47	33.140933°	-96.829856°	Individual surface slag fragment		
	Slag-48	33.141026°	-96.829806°	Individual surface slag fragment		
	Slag-49	33.141111°	-96.829881°	Individual surface slag fragment		
	Slag-50	33.141100°	-96.830062°	Individual surface slag fragment		



**TABLE 1**  
**Locations of Surface Slag & Battery Case Fragments**  
**Exide Operating Areas**

*Exide Technologies*  
*7471 South 5th Street*  
*Frisco, Texas*

	Material Name	Latitude	Longitude	Description	How to Address	Addressed (Y/N)
North Disposal Area (cont'd.)	Areas of Observed Surface Slag (cont'd)					
	Slag-51	33.141191°	-96.830258°	Individual surface slag fragment		
	Slag-52	33.141300°	-96.830455°	Individual surface slag fragment		
	Slag-53	33.141436°	-96.830510°	Individual surface slag fragment		
	Slag-54	33.141960°	-96.830603°	Individual surface slag fragment		
	Slag-55	33.141943°	-96.830564°	Individual surface slag fragment		
	Slag-56	33.141785°	-96.829957°	Individual surface slag fragment		
	Slag-57	33.141710°	-96.829914°	Individual surface slag fragment		
	Slag-58	33.141715°	-96.829803°	Individual surface slag fragment		
	Slag-59	33.141473°	-96.829704°	Individual surface slag fragment		
	Slag-60	33.141654°	-96.829637°	Individual surface slag fragment		
	Slag-61	33.141644°	-96.829306°	Individual surface slag fragment		
	Slag-62	33.141865°	-96.829207°	Individual surface slag fragment		
	Slag-63	33.141984°	-96.829487°	Individual surface slag fragment		
	Slag-64	33.142030°	-96.829328°	Individual surface slag fragment		
	Slag-65	33.142055°	-96.829960°	Individual surface slag fragment		
	Slag-66	33.142055°	-96.829866°	Individual surface slag fragment		
	Slag-67	33.142146°	-96.828804°	Individual surface slag fragment		
	Slag-68	33.141728°	-96.828037°	Individual surface slag fragment		
	Slag-69	33.141752°	-96.827980°	Individual surface slag fragment		
	Slag-70	33.142038°	-96.826681°	Individual surface slag fragment		
	Slag-71	33.141967°	-96.826643°	Individual surface slag fragment		
	Slag-72	33.141874°	-96.826465°	Individual surface slag fragment		
	Slag-73	33.141208°	-96.829222°	Individual surface slag fragment		
	Slag-74	33.141087°	-96.826952°	Individual surface slag fragment		
Stewart Creek	Slag-75	33.139851	-96.830809	Large Fragments in Bank		
	Slag-76	33.140198	-96.829193	Large Fragments in Bank		
	Slag-77	33.140858	-96.830196	Large Fragments in Bank		
	Slag-78	33.140865	-96.830209	Large Fragments in Bank		
	Slag-79	33.141295	-96.830845	Large Fragments in Bank		
	Slag-80	33.141386	-96.830926	Large Fragments in Bank		
	Slag-81	33.141509	-96.831117	Large Fragments in Bank		
	Slag-82	33.141570	-96.831099	Large Fragments in Bank		
	Slag-83	33.142439	-96.832506	Large Fragments in Bank		
	Slag-84	33.142457	-96.832538	Large Fragments in Bank		
	Slag-85	33.142500	-96.832602	Large Fragments in Bank		
	Slag-86	33.142911	-96.832945	Sml Fragment		
Crystallizer Plant Rd	Plastic-33	33.140698	-96.833515	Single Fragment		
North Landfill Area	Slag-87	33.145460	-96.827074	Small Fragment		
	Slag-88	33.144404	-96.826258	Small Fragment		
	Slag-89	33.144156	-96.827996	Small Fragment		
	Slag-90	33.143626	-96.826234	Small Fragment		
	Slag-91	33.143270	-96.826199	Small Fragment		
	Slag-92	33.143257	-96.826849	Small Fragment		
	Slag-93	33.143260	-96.827165	Small Fragment		
Former Fire Training Area	Slag-94	33.141828	-96.826013	Small Fragment		
	Slag-95	33.141850	-96.826067	Small Fragment		
	Slag-96	33.141836	-96.826031	Small Fragment		
	Slag-97	33.141893	-96.825990	Small Fragment		
	Slag-98	33.141853	-96.825660	Small Fragment		
	Slag-99	33.142338	-96.825668	Small Fragment		



**TABLE 1**  
**Locations of Surface Slag & Battery Case Fragments**  
**Exide Operating Areas**

*Exide Technologies*  
*7471 South 5th Street*  
*Frisco, Texas*

	Material Name	Latitude	Longitude	Description	How to Address	Addressed (Y/N)
<b>Areas of Observed Plastic Battery Case Fragments</b>						
<b>South Disposal Area</b>	Plastic-1	33.139373°	-96.829089°	Small Fragment		
	Plastic-2	33.139306°	-96.829051°	Small Fragment		
	Plastic-3	33.138887°	-96.828926°	Small Fragment		
	Plastic-4	33.138840°	-96.828927°	Small Fragment		
	Plastic-5	33.138807°	-96.828985°	Small Fragment		
	Plastic-6	33.138484°	-96.828728°	Small Fragment		
	Plastic-7	33.138675°	-96.827496°	Small Fragment		
	Plastic-8	33.138678°	-96.828028°	Small Fragment		
	Plastic-9	33.138584°	-96.828346°	Small Fragment		
	Plastic-10	33.139215°	-96.828764°	Small Fragment		
	Plastic-11	33.139185°	-96.828297°	Small Fragment		
	Plastic-12	33.138998°	-96.828163°	Small Fragment		
	Plastic-13	33.138934°	-96.828041°	Small Fragment		
	Plastic-14	33.138856°	-96.827732°	Small Fragment		
	Plastic-15	33.138850°	-96.827504°	Small Fragment		
	Plastic-16	33.138982°	-96.827482°	Small Fragment		
	Plastic-17	33.139159°	-96.827685°	Small Fragment		
	Plastic-18	33.139124°	-96.826543°	Small Fragment		
	Plastic-19	33.139016°	-96.826155°	Small Fragment		
	Plastic-20	33.139023°	-96.826020°	Small Fragment		
	Plastic-21	33.139110°	-96.827351°	Small Fragment		
	Plastic-22	33.139031°	-96.827184°	Small Fragment		
	Plastic-23	33.138985°	-96.827040°	Small Fragment		
	Plastic-24	33.138903°	-96.826752°	Small Fragment		
<b>Operating Class 2 Non-Hazardous Waste Landfill Area</b>	Plastic-25	33.141027°	-96.827761°	3 to 6-inch Slag fragments		
	Plastic-26	33.141035°	-96.828216°	3 to 6-inch Slag fragments		
	Plastic-27	33.141066°	-96.828816°	3 to 6-inch Slag fragments		
	Plastic-28	33.140931°	-96.829423°	3 to 6-inch Slag fragments		
	Plastic-29	33.140961°	-96.829566°	3 to 6-inch Slag fragments		
	Plastic-30	33.141560°	-96.830382°	3 to 6-inch Slag fragments		
	Plastic-31	33.141689°	-96.827991°	3 to 6-inch Slag fragments		
	Plastic-32	33.141656°	-96.827126°	3 to 6-inch Slag fragments		
<b>Debris Clusters Containing Slag and Battery Chips</b>						
<b>Debris Clusters<sup>1</sup></b>	DA Debris Field	33.138506°	-96.827612°	Clusters of small chips and slag		
	DA Debris Field	33.141048°	-96.827420°	Clusters of small chips and slag		
	DA Debris Field	33.141024°	-96.828512°	Clusters of small chips and slag		

1 - Coordinates for debris field represent the approximate center of field.



**PHOTOGRAPHIC LOG**

**ATTACHMENT A**





**Photo 1: View of the South Disposal Area (SDA) from the western boundary facing east.**



**Photo 2: Cracks in SDA cap caused by drought.**



**Attachment A**  
**Photographic Log**  
Disposal Area Evaluation  
Frisco, Texas

11-4-11

Slag Sampling

W&M Project No.: 112.060





**Photo 3: Animal burrow with plastic chips exposed near entrance.**



**Photo 4: Slag material exposed by animal activity within the SDA.**



**Attachment A**  
**Photographic Log**  
Disposal Area Evaluation  
Frisco, Texas

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Slag Sampling

W&M Project No.: 112.060





**Photo 5: View of heat-stressed vegetation and evidence of vehicular traffic on the North Disposal Area (NDA).**



**Photo 6: Debris field of plastic chips and slag in an area of high traffic and equipment storage located within the NDA.**



**Attachment A**  
**Photographic Log**  
Disposal Area Evaluation  
Frisco, Texas

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Slag Sampling

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**Photo 7: Slag material exposed at a storm water drainage pipe within the NDA.**



**Photo 8: Exposed treated slag located in the northern section of the NDA.**



**Attachment A**  
**Photographic Log**  
Disposal Area Evaluation  
Frisco, Texas

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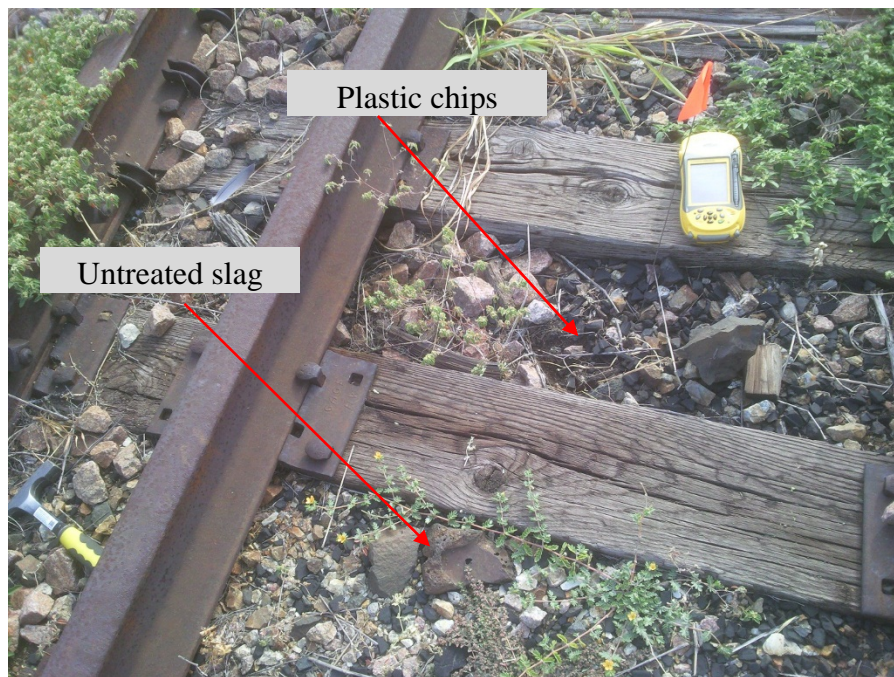
Slag Sampling

W&M Project No.: 112.060





**Photo 9: Exposed, untreated slag located between the NDA and rail line north of the main plant.**



**Photo 10: View of GPS data being collected on slag and plastic chips located within the railroad tracks located north of the main plant.**



**Attachment A**  
**Photographic Log**  
Disposal Area Evaluation  
Frisco, Texas

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**Photo 11: Fragmented bullets observed under leaves covering the firing range berm.**



**Photo 12: Exposed slag within the firing range berm.**



**Attachment A**  
**Photographic Log**  
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Frisco, Texas

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Slag Sampling

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**Photo 13: View of large slag fragments located within the dense vegetation east of the SDA.**



**Photo 14: Plastic chips located within dense vegetation area east of the SDA.**



**Attachment A**  
**Photographic Log**  
Disposal Area Evaluation  
Frisco, Texas

11-4-11

Slag Sampling

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**Photo 15: Lead slag observed along Stewart Creek.**



**Photo 16: Lead slag observed just north of the Frisco Fire training facility.**



**Attachment A**  
**Photographic Log**  
Disposal Area Evaluation  
Frisco, Texas

3-25-13

Slag Sampling

W&M Project No.: 112.072