

GUARDIAN SYSTEMS, INC.

1108 Ashville Road P.O. Box 190 Leeds, Alabama 35094

(205) 699-6647 Telephone Toll Free (866) 729-7211 Fax (205) 699-3882

Page 1 of 4

City of Leeds City of Leeds 1040 Park Drive Leeds, AL 35094

Attention: Mr. Brad Watson

1704-00291

Sample # 001

Control No: Sampler:

Sample ID:

Little Cahaba River - Upstream Dry Samples

Report Date: 04/25/2017 Receive Date: 04/18/2017 Receive Time: 14:45

Sample Date: 04/18/2017

Sample Time: 14:00

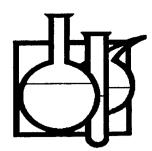
Laboratory Certificate

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PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
Phosphate, Total Phosphorus	0.38	mg/L	TLB	04/20/2017	21:32	365.2	(1)
Biochemical Oxygen Demand BOD, Initial Set-up BOD, Final Read Back	2.	mg/L	LSC LSC LSC	04/24/2017 04/19/2017 04/24/2017	10:00 9:00 10:00	SM 5210B	(2)
Solids, Total Suspended	3.	mg/L	MJN	04/20/2017	17:00	SM-2540D	(2)
Solids, Total Dissolved	246.	mg/L	LSC	04/21/2017	15:00	SM-2540C	(2)
Nitrogen, Nitrite	<0.10	mg/L	LSC	04/20/2017	10:00	300.0	(1)
Nitrogen, Nitrate	1.56	mg/L	LSC	04/20/2017	10:00	300.0	(1)
Phosphorous, Dissolved	0.35	mg/L	TLB	04/20/2017	21:32	365.2	(1)
Chromium Hex. Colorimetric	< 0.02	mg/l	MJN	04/18/2017	8:30	3500-Cr B	
Fecal Coliform	10.	col/100mL	LSC	04/19/2017	15:30	SM-9222 D	(2)
E-Coli	6.	col/100mL	LSC	04/19/2017	15:30	SM-9222 B	(2)
Mercury,Total	< 0.001	mg/L	CFS	04/21/2017	14:30	245.7	
Copper	< 0.02	mg/L	DRH	04/24/2017	10:00	200.7	
lickel	0.002	mg/L	DRH	04/24/2017	10:00	200.8	
Silver, Total	< 0.001	mg/L	DRH	04/24/2017	10:00	200.8	
linc	< 0.03	mg/L	DRH	04/24/2017	10:00	200.7	(1)
ead - mg/L	< 0.001	mg/L	DRH	04/20/2017	14:00	200.8	

This Certificate is Continued On Next Page.

METHOD REFERENCES

- Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993 May 1994
 Standard Methods for the Examination of Water and Waste Water, 18th, 19th, 20th, and 22nd Edition, 2012
 Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
- 1987 ASTM Annual Standards Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
- Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
- 7. NIOSH Manual of Anaytical Methods, 4th Edition, May 1996



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Page 2 of 4

City of Leeds City of Leeds 1040 Park Drive Leeds, AL 35094

Attention: Mr. Brad Watson

Report Date: 04/25/2017 Receive Date: 04/18/2017 Receive Time: 14:45

Sample Date: 04/18/2017

Sample Time: 14:00

1704-00291 Control No: Sampler:

Little Cahaba River - Upstream Dry Samples Sample ID:

Sample # 001

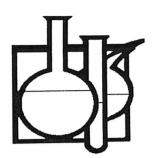
Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
Hardness, Total	190.	mg/L	DRH	04/20/2017	12:00	200.7	
Chromium, Trivalent	<0.02	mg/L	DRH	04/24/2017	10:00	200.7	(1)
Calcium	67.0	mg/L	DRH	04/20/2017	12:00	200.7	(1)
Magnesium	5.50	mg/L	DRH	04/20/2017	12:00	200.7	(1)
Oil and Grease, Total	<5.0	mg/L	LSC	04/20/2017	8:00	1664	
Cyanide (Total)	<0.02	mg/L	TLB	04/25/2017	14:10	335.4	(1)
Nitrogen, Kjeldahl	<0.5	mg/L	TLB	04/21/2017	14:17	351.2	(1)
Chemical Oxygen Demand	<10.0	mg/L	CFS	04/21/2017	17:00	410.4	(1)
Nitrogen, Ammonia	0.12	mg/L	TLB	04/20/2017	15:31	350.2	(1)
Arsenic	<0.001	mg/L	DRH	04/24/2017	10:00	200.8	
pH	7.32	SU	LSC	04/18/2017	17:30	150.1	(1)

This Certificate is Continued On Next Page.

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- Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993 May 1994 Standard Methods for the Examination of Water and Waste Water, 18th, 19th, 20th, and 22nd Edition, 2012
- Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3st Edition, Updated IV December 1996
- 1987 ASTM Annual Standards
- Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
 Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
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Page 4 of 4

City of Leeds City of Leeds 1040 Park Drive Leeds, AL 35094

Attention: Mr. Brad Watsor

Report Date: 04/25/2017 Receive Date: 04/18/2017

Receive Time: 14:45

Control No:

1704-00291

Sample # 002

Sample Date: 04/18/2017

Sampler: Sample ID:

Little Cahaba River- Downstream Dry Samples

Sample Time: 14:30

Laboratory Certificate

			,				
PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
Hardness, Total Chromium, Trivalent Calcium Magnesium Oil and Grease, Total Cyanide (Total) Nitrogen, Kjeldahl Chemical Oxygen Demand Nitrogen, Ammonia Arsenic	213. <0.02 73.4 7.20 <5.0 <0.02 <0.5 <10.0 <0.1 <0.001 7.69	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	DRH DRH DRH LSC TLB TLB CFS TLB DRH LSC	04/20/2017 04/24/2017 04/20/2017 04/20/2017 04/20/2017 04/25/2017 04/21/2017 04/21/2017 04/20/2017 04/24/2017 04/18/2017	12:00 10:00 12:00 12:00 8:00 14:10 14:17 17:00 15:31 10:00 17:30	200.7 200.7 200.7 200.7 1664 335.4 351.2 410.4 350.2 200.8 150.1	(1) (1) (1) (1) (1) (1) (1)
	< 0.001	mg/L	DRH	04/24/2017			(1)

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1987 ASTM Annual Standards

Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995

Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995

7. NIOSH Manual of Anaytical Methods, 4th Edition, May 1996

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Chain of Custody Record/ Analysis Report



www.gsilab.com (205) 699-3882 Fax

gsi@gsiiab.cc	- Brad Watson						Pho	Phone:			
	Wir. brau wasson						Fax:	n			
	4040 Bark Drive						P.O.).#:			
Address:	יייייייייייייייייייייייייייייייייייייי						Pro	ject:			
	Leeds, AL 35094		76	Sample	Bottle	Sample	Sample Preserv	vative			Analysis Requested
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				×	×		×	×	Ammo	Ammonia-Nitrogen	
				×	×		×	×	Phosphorus	horus	
				×	×		×	×	T N		
				×	×		×	×	COD		
				×	×		×	×	Fecal	Fecal Coliform / Ecoli	
				×	×	×		×	Cu.Pb	Cu.Pb.Zn.As.TriCr.Ha.Ca/Mg.Ni.Ag	Ca/M
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Were all samples properly preserved?	operly preserved? Yes	No	Initials	S			S	Sample temp.	mp.	n ô	
Comments:											

Put an "X" in the appropriate column for sample type and sample preservative. Write in analysis requested.
* For composite samples include start and stop date and time in comments section **Write in preservative used in comments

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Chain of Custody Record/ Analysis Report



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Leeds, AL 35094 Sample Sample & Date Time & O G G G G G G G G G G G G G G G G G G	Client: N Company: C Address: 1	City of Leeds 1040 Park Drive										P.C	P.O.#:	P.O.#:	P.O.#:	P.O.#:	P.O.#:	P.O.#:	P.O.#:	P.O.#:	P.O.#:
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Put an "X" in the appropriate column for sample type and sample preservative. Write in analysis requested.
* For composite samples include start and stop date and time in comments section **Write in preservative used in comments