

GUARDIAN SYSTEMS, INC.

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

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

Page 1 of 9

City of Leeds
City of Leeds
1040 Park Drive
Leeds, AL 35094
Attention: Mr. Brad Watson

Report Date: 10/30/2020
Receive Date: 09/24/2020
Receive Time: 11:30

Control No : 2009-00397 Sample # 001
Sampler : DB
Sample ID: LC-MP-1

Sample Date: 09/24/2020
Sample Time: 9:29

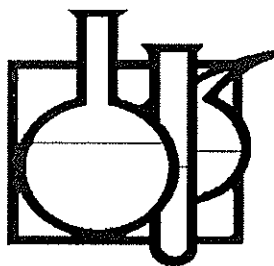
Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
pH	7.39	SU	DB	09/24/2020	9:29	150.1	
Turbidity, Nephelometric	2.92	NTU	DB	09/24/2020	9:29	180.1	
Conductance, Sp. (field)	919.	umhos	DB	09/24/2020	9:29	120.1	(1)
Nitrogen, Ammonia	0.2	mg/L	CAC	10/06/2020	16:34	350.2	(1)
Color, APHA	<10.	PCU	ML	09/24/2020	15:10	110.2	
Hardness, Total	169.	mg/L	DRH	09/30/2020	12:00	200.7	
Calcium	55.6	mg/L	DRH	09/30/2020	12:00	200.7	(1)
Magnesium	7.27	mg/L	DRH	09/30/2020	12:00	200.7	(1)
Potassium	1.89	mg/L	DRH	10/29/2020	10:00	200.7	(1)

This Certificate is Continued On Next Page.

METHOD REFERENCES

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



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Leeds, AL 35094
Attention: Mr. Brad Watson

Report Date: 10/30/2020
Receive Date: 09/24/2020
Receive Time: 11:30

Control No : 2009-00397 Sample # 002
Sampler : DB
Sample ID: LC-MP-2

Sample Date: 09/24/2020
Sample Time: 9:19

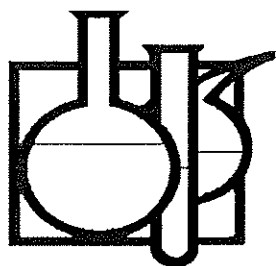
Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
pH	7.28	SU	DB	09/24/2020	9:19	150.1	
Turbidity, Nephelometric	3.09	NTU	DB	09/24/2020	9:19	180.1	
Conductance, Sp. (field)	909.	umhos	DB	09/24/2020	9:19	120.1	(1)
Nitrogen, Ammonia	0.1	mg/L	CAC	10/06/2020	16:34	350.2	(1)
Color, APHA	10.	PCU	ML	09/24/2020	15:10	110.2	
Hardness, Total	167.	mg/L	DRH	09/30/2020	12:00	200.7	
Calcium	55.3	mg/L	DRH	09/30/2020	12:00	200.7	(1)
Magnesium	7.06	mg/L	DRH	09/30/2020	12:00	200.7	(1)
Potassium	1.93	mg/L	DRH	10/29/2020	10:00	200.7	(1)

This Certificate is Continued On Next Page.

METHOD REFERENCES

1. Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993 May 1994
2. Standard Methods for the Examination of Water and Waste Water, 18th, 19th, 20th, and 22nd Edition, 2012
3. Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
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Attention: Mr. Brad Watson

Report Date: 10/30/2020
Receive Date: 09/24/2020
Receive Time: 11:30

Control No : 2009-00397 Sample # 003
Sampler : DB
Sample ID: LC-MP-3

Sample Date: 09/24/2020
Sample Time: 9:07

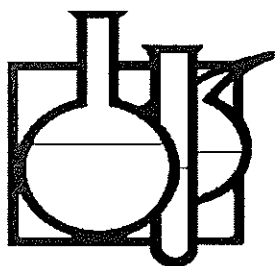
Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
pH	7.29	SU	DB	09/24/2020	9:07	150.1	
Turbidity, Nephelometric	3.68	NTU	DB	09/24/2020	9:07	180.1	
Conductance, Sp. (field)	934.	umhos	DB	09/24/2020	9:07	120.1	(1)
Nitrogen, Ammonia	0.2	mg/L	CAC	10/06/2020	16:34	350.2	(1)
Color, APHA	<10.	PCU	ML	09/24/2020	15:10	110.2	
Hardness, Total	166.	mg/L	DRH	09/30/2020	12:00	200.7	
Calcium	55.1	mg/L	DRH	09/30/2020	12:00	200.7	(1)
Magnesium	6.84	mg/L	DRH	09/30/2020	12:00	200.7	(1)
Potassium	2.02	mg/L	DRH	10/29/2020	10:00	200.7	(1)

This Certificate is Continued On Next Page.

METHOD REFERENCES

1. Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993 May 1994
2. Standard Methods for the Examination of Water and Waste Water, 18th, 19th, 20th, and 22nd Edition, 2012
3. Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
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Attention: Mr. Brad Watson

Report Date: 10/30/2020
Receive Date: 09/24/2020
Receive Time: 11:30

Control No : 2009-00397 Sample # 004
Sampler : DB
Sample ID: LC-SS-6

Sample Date: 09/24/2020
Sample Time: 10:00

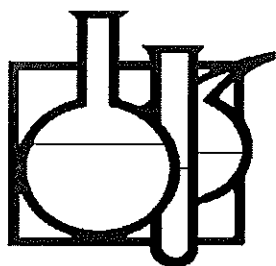
Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
pH	7.34	SU	DB	09/24/2020	10:00	150.1	
Turbidity, Nephelometric	4.99	NTU	DB	09/24/2020	10:00	180.1	
Conductance, Sp. (field)	957.	umhos	DB	09/24/2020	10:00	120.1	(1)
Nitrogen, Ammonia	0.1	mg/L	CAC	10/06/2020	16:34	350.2	(1)
Color, APHA	<10.	PCU	ML	09/24/2020	15:10	110.2	
Hardness, Total	157.	mg/L	DRH	09/30/2020	12:00	200.7	
Calcium	52.4	mg/L	DRH	09/30/2020	12:00	200.7	(1)
Magnesium	6.41	mg/L	DRH	09/30/2020	12:00	200.7	(1)
Potassium	2.38	mg/L	DRH	10/29/2020	10:00	200.7	(1)

This Certificate is Continued On Next Page.

METHOD REFERENCES

1. Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993 May 1994
2. Standard Methods for the Examination of Water and Waste Water, 18th, 19th, 20th, and 22nd Edition, 2012
3. Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
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City of Leeds
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Leeds, AL 35094
Attention: Mr. Brad Watson

Report Date: 10/30/2020
Receive Date: 09/24/2020
Receive Time: 11:30

Control No : 2009-00397 Sample # 005
Sampler : DB
Sample ID: LC-SS-7

Sample Date: 09/24/2020
Sample Time: 10:14

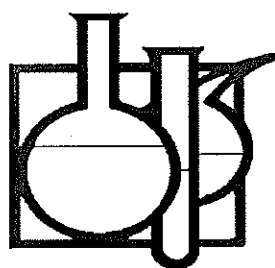
Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
pH	7.49	SU	DB	09/24/2020	10:14	150.1	
Turbidity, Nephelometric	3.46	NTU	DB	09/24/2020	10:14	180.1	
Conductance, Sp. (field)	1,035.	umhos	DB	09/24/2020	10:14	120.1	(1)
Nitrogen, Ammonia	0.2	mg/L	CAC	10/06/2020	16:34	350.2	(1)
Color, APHA	11.	PCU	ML	09/24/2020	15:10	110.2	
Hardness, Total	148.	mg/L	DRH	09/30/2020	12:00	200.7	
Calcium	49.8	mg/L	DRH	09/30/2020	12:00	200.7	(1)
Magnesium	5.86	mg/L	DRH	09/30/2020	12:00	200.7	(1)
Potassium	2.83	mg/L	DRH	10/29/2020	10:00	200.7	(1)

This Certificate is Continued On Next Page.

METHOD REFERENCES

1. Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993 May 1994
2. Standard Methods for the Examination of Water and Waste Water, 18th, 19th, 20th, and 22nd Edition, 2012
3. Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
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City of Leeds
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Leeds, AL 35094
Attention: Mr. Brad Watson

Report Date: 10/30/2020
Receive Date: 09/24/2020
Receive Time: 11:30

Control No : 2009-00397 Sample # 006
Sampler : DB
Sample ID: LC-SS-9

Sample Date: 09/24/2020
Sample Time: 10:31

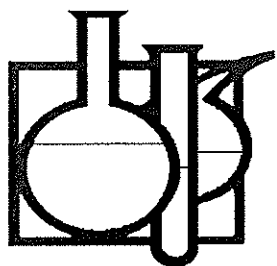
Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
pH	7.51	SU	DB	09/24/2020	10:31	150.1	
Turbidity, Nephelometric	3.34	NTU	DB	09/24/2020	10:31	180.1	
Conductance, Sp. (field)	931.	umhos	DB	09/24/2020	10:31	120.1	(1)
Nitrogen, Ammonia	0.1	mg/L	CAC	10/06/2020	16:34	350.2	(1)
Color, APHA	11.	PCU	ML	09/24/2020	15:10	110.2	
Hardness, Total	140.	mg/L	DRH	09/30/2020	12:00	200.7	
Calcium	46.9	mg/L	DRH	09/30/2020	12:00	200.7	(1)
Magnesium	5.56	mg/L	DRH	09/30/2020	12:00	200.7	(1)
Potassium	2.59	mg/L	DRH	10/29/2020	10:00	200.7	(1)

This Certificate is Continued On Next Page.

METHOD REFERENCES

1. Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993 May 1994
2. Standard Methods for the Examination of Water and Waste Water, 18th, 19th, 20th, and 22nd Edition, 2012
3. Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
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City of Leeds
City of Leeds
1040 Park Drive
Leeds, AL 35094
Attention: Mr. Brad Watson

Report Date: 10/30/2020
Receive Date: 09/24/2020
Receive Time: 11:30

Control No : 2009-00397 Sample # 007
Sampler : DB
Sample ID: LC-SS-10

Sample Date: 09/24/2020
Sample Time: 10:39

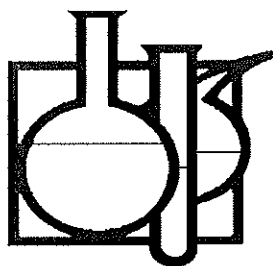
Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
pH	7.77	SU	DB	09/24/2020	10:39	150.1	
Turbidity, Nephelometric	3.16	NTU	DB	09/24/2020	10:39	180.1	
Conductance, Sp. (field)	941.	umhos	DB	09/24/2020	10:39	120.1	(1)
Nitrogen, Ammonia	0.2	mg/L	CAC	10/06/2020	16:34	350.2	(1)
Color, APHA	12.	PCU	ML	09/24/2020	15:10	110.2	
Hardness, Total	142.	mg/L	DRH	09/30/2020	12:00	200.7	
Calcium	47.6	mg/L	DRH	09/30/2020	12:00	200.7	(1)
Magnesium	5.65	mg/L	DRH	09/30/2020	12:00	200.7	(1)
Potassium	2.55	mg/L	DRH	10/29/2020	10:00	200.7	(1)

This Certificate is Continued On Next Page.

METHOD REFERENCES

1. Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993 May 1994
2. Standard Methods for the Examination of Water and Waste Water, 18th, 19th, 20th, and 22nd Edition, 2012
3. Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV/December 1996
4. 1987 ASTM Annual Standards
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6. Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
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City of Leeds
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1040 Park Drive
Leeds, AL 35094
Attention: Mr. Brad Watson

Report Date: 10/30/2020
Receive Date: 09/24/2020
Receive Time: 11:30

Control No : 2009-00397 Sample # 008
Sampler : DB
Sample ID: DC-SS-3

Sample Date: 09/24/2020
Sample Time: 11:02

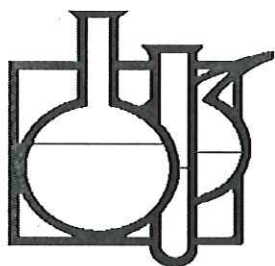
Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
pH	7.17	SU	DB	09/24/2020	11:02	150.1	
Turbidity, Nephelometric	13.50	NTU	DB	09/24/2020	11:02	180.1	
Conductance, Sp. (field)	427.	umhos	DB	09/24/2020	11:02	120.1	(1)
Color, APHA	27.	PCU	ML	09/24/2020	15:10	110.2	
Nitrogen, Ammonia	0.1	mg/L	CAC	10/06/2020	16:34	350.2	(1)
Calcium	25.7	mg/L	DRH	09/30/2020	12:00	200.7	(1)
Magnesium	2.06	mg/L	DRH	09/30/2020	12:00	200.7	(1)
Potassium	2.16	mg/L	DRH	10/29/2020	10:00	200.7	(1)
Hardness, Total	73.	mg/L	DRH	09/30/2020	12:00	200.7	

This Certificate is Continued On Next Page.

METHOD REFERENCES

1. Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993 May 1994
2. Standard Methods for the Examination of Water and Waste Water, 18th, 19th, 20th, and 22nd Edition, 2012
3. Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
4. 1987 ASTM Annual Standards
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Leeds, AL 35094
Attention: Mr. Brad Watson

Report Date: 10/30/2020
Receive Date: 09/24/2020
Receive Time: 11:30

Control No : 2009-00397 Sample # 009
Sampler : DB
Sample ID: DC-SS-4

Sample Date: 09/24/2020
Sample Time: 11:12

Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
pH	7.86	SU	DB	09/24/2020	11:12	150.1	
Turbidity, Nephelometric	14.15	NTU	DB	09/24/2020	11:12	180.1	
Specific Conductance	432.	umhos	MJN	09/28/2020	9:30	SM2510B	
Color, APHA	30.	PCU	ML	09/24/2020	15:10	SM2120B	
Nitrogen, Ammonia	0.2	mg/L	CAC	10/06/2020	16:34	350.2	(1)
Calcium	24.7	mg/L	DRH	09/30/2020	12:00	200.7	(1)
Magnesium	1.89	mg/L	DRH	09/30/2020	12:00	200.7	(1)
Potassium	2.17	mg/L	DRH	10/29/2020	10:00	200.7	(1)
Hardness, Total	69.	mg/L	DRH	09/30/2020	12:00	200.7	

Approved By: 

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1. Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993 May 1994
2. Standard Methods for the Examination of Water and Waste Water, 18th, 19th, 20th, and 22nd Edition, 2012
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Client: Mr. Brad Watson		Phone: _____	
Company: City of Leeds		Fax: _____	
Address: 1040 Park Drive		P.O.#: _____	
Leeds, AL 35094		Project: 2020 2nd Semester Stormwater- Wet	

Sample ID	Sample Description	Sample Date	Sample Time	Sample			Bottle				Sample Preservative					Analysis Requested				
				Comp. *	Grab	Glass	Plastic	HCl	HNO ₃	H ₂ SO ₄	NaOH	Cool 4°C	Other **	Field pH:	Field Turbidity:	Field Conductivity:	APHA Color	Ammonia	Hardness. Ca. Mg. K	
	LC-MPI	9-24-20	9:29														7.39			
																	2.92			
																	919			
					X			X												
				X				X												
				X				X												
	LC-MP2		9:19														7.28			
																	3.09			
																	909			
				X				X												
				X				X												
				X				X												

Sampled by: Dale Brackhaage	Relinquished by: Dale Brackhaage	Date: 9-24-20	Time: 11:30
Received by: _____	Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Relinquished by: _____	Date: _____	Time: _____

Received for Laboratory by: Dale Brackhaage Date: 24 Sept 20 Time: 11:30

Was Shipped Container intact when received? Yes ☒ No ☐ Seals intact? Yes ☒ No ☐

Were all samples properly preserved? Yes ☒ No ☐ Initials DB Sample temp. 64 °C

Comments: Other = See Above for Sample Preservatives, Field Measurements			
PH Meter Calibration Info	Buffer Traceability #	Exp. Date	QC Sample
Buffer #: 4.00	INRE 20030203	1-21-22	Traceability # INGC 20051101
Buffer #: 7.00	INRE 19101602	31 Sept 21	pH: 6.42 (6.40)
Buffer #: 10.00	INRE 19101603	10-20	Turb: _____
Turbidity Meter Calibration Info	Standard Traceability #	Exp. Date	Calibration Temp: 68°F
Standard #			
Standard #			
Standard #			

Notes: _____

Chain of Custody Record/ Analysis Report

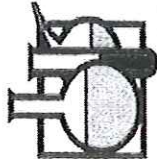
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Chain of Custody Record/ Analysis Report

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