

02/15/2012

Page: 1

City of Leoti  
Attn: Curtis Kreutzer  
P.O. Box 7E  
Leoti, KS 67861

Date and Time Received: 01/27/2012 09:30  
Continental File No.: 8017  
Continental Order No.: 101092  
Project ID: Treated Water

Dear Mr. Kreutzer:

This laboratory report containing the samples indicated below, includes 12 pages for the analytical report, 2 page(s) for the chain of custody and/or analysis request, and 1 page(s) for the sample receipt form.

<u>CAS LAB ID #</u>	<u>SAMPLE DESCRIPTION</u>	<u>SAMPLE TYPE</u>	<u>DATE SAMPLED</u>
12011835	Treated Water	Liquid	1/26/2012

The Appendix and Quality Control sections are integral parts of this laboratory report and may contain important data qualifiers.

All results are reported on a wet weight basis unless otherwise stated.

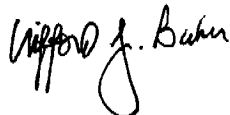
Samples will be retained for thirty days unless Continental is otherwise notified.

Continental is accredited by the State of Kansas through the National Environmental Laboratory Accreditation Program (NELAP). The results contained in this report were obtained using Continental's Standard Operating Procedures. These procedures are in substantial compliance with the approved methods referenced and the standards published by NELAP unless otherwise noted in the Appendix and Quality Control sections of this report.

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Thank you for choosing Continental for this project.

CONTINENTAL ANALYTICAL SERVICES, INC.



Clifford J. Baker  
Technical Manager



Petra M. Craddock  
Project Manager



525 N. Eighth St. - P.O. Box 3737 - Salina, KS 67402-3737

785-827-1273 800-535-3076 Fax 785-823-7830

KDHE Environmental Laboratory Accreditation No. E-10146



Client: City of Leoti  
 Attn: Curtis Kreutzer  
 P.O. Box 7E  
 Leoti, KS 67861

Date Reported: 02/15/2012  
 Date Received: 01/27/2012  
 Continental File No: 8017  
 Continental Order No: 101092

Lab Number: 12011835  
 Sample Description: Treated Water

Date Sampled: 01/26/2012  
 Time Sampled: 1100

<u>Analysis</u>	<u>Concentration</u>	<u>Units</u>	<u>Book/Page</u>
Aluminum, Tot. Rec., ICP	ND(100)	µg/L	7157/187
Antimony, Tot. Rec., ICP	ND(10)	µg/L	7157/187
Arsenic, Tot. Rec., ICP	ND(5)	µg/L	7157/188
Barium, Tot. Rec., ICP	74	µg/L	7157/188
Beryllium, Tot. Rec., ICP	ND(2)	µg/L	7157/187
Cadmium, Tot. Rec., ICP	ND(2)	µg/L	7157/187
Calcium, Tot. Rec., ICP	4.1	mg/L	7157/187
Chromium, Tot. Rec., ICP	ND(5)	µg/L	7157/187
Copper, Tot. Rec., ICP	ND(10)	µg/L	7157/187
Hardness (Calculated)	42	mg/L as CaCO3	7157/192
Iron, Tot. Rec., ICP	ND(0.1)	mg/L	7157/187
Lead, Tot. Rec., ICP	ND(3)	µg/L	7157/187
Magnesium, Tot. Rec., ICP	0.6	mg/L	7157/187
Manganese, Tot. Rec., ICP	8	µg/L	7157/187
Mercury, Total	ND(0.2)	µg/L	7203/69
Nickel, Tot. Rec., ICP	11	µg/L	7157/187
Potassium, Tot. Rec., ICP	0.6	mg/L	7157/188
Selenium, Tot. Rec., ICP	ND(5)	µg/L	7157/187
Silicon as Silica	3.52	mg/L	7157/194
Silver, Tot. Rec., ICP	ND(5)	µg/L	7157/187
Sodium, Tot. Rec., ICP	28.6	mg/L	7157/187
Thallium, Tot. Rec., ICP	ND(5)	µg/L	7157/187
Zinc, Tot. Rec., ICP	71	µg/L	7157/187
Alkalinity, as CaCO3 at pH 4.5	ND(20)	mg/L	7172/33
Ammonia, Total, as N	ND(0.1)	mg/L	7061/260
Chloride	103	mg/L	7107/215
Fluoride	0.1	mg/L	7107/217
Kjeldahl Nitrogen, as N (TKN)	ND(1.0)	mg/L	6854/433
Nitrate, as N	ND(0.1)	mg/L	7107/214
pH	5.06 H QC	Std. units	7183/148
Phosphorus, Total, as P	ND(0.2)	mg/L	7061/265
Solids, Total Dissolved	214 QC	mg/L	7059/726
Specific Conductance	399	µmhos/cm	7185/20
Sulfate	1.3	mg/L	7107/215
Turbidity	ND(0.5) H	NTU	7013/15

<u>Analysis</u>	<u>Date/Time Prepared</u>	<u>Date/Time Analyzed</u>	<u>QC Batch</u>	<u>Inst. Batch</u>	<u>Analyst</u>	<u>Method(s)</u>
Aluminum, Tot. Rec., ICP	01/30/12 0937	01/30/12 1701	120130-1	5IP4030	KMW	200.7 Rev. 4.4
Antimony, Tot. Rec., ICP	01/30/12 0937	01/30/12 1701	120130-1	5IP4030	KMW	200.7 Rev. 4.4

-Continued-

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Analysis	Date/Time		Date/Time		QC	Inst.	Analyst	Method(s)
	Prepared		Analyzed		Batch	Batch		
Arsenic, Tot. Rec., ICP	01/30/12	0937	01/31/12	1938	120130-1	5IP4031	KMW	200.7 Rev. 4.4
Barium, Tot. Rec., ICP	01/30/12	0937	01/31/12	1938	120130-1	5IP4031	KMW	200.7 Rev. 4.4
Beryllium, Tot. Rec., ICP	01/30/12	0937	01/30/12	1701	120130-1	5IP4030	KMW	200.7 Rev. 4.4
Cadmium, Tot. Rec., ICP	01/30/12	0937	01/30/12	1701	120130-1	5IP4030	KMW	200.7 Rev. 4.4
Calcium, Tot. Rec., ICP	01/30/12	0937	01/30/12	1701	120130-1	5IP4030	KMW	200.7 Rev. 4.4
Chromium, Tot. Rec., ICP	01/30/12	0937	01/30/12	1701	120130-1	5IP4030	KMW	200.7 Rev. 4.4
Copper, Tot. Rec., ICP	01/30/12	0937	01/30/12	1701	120130-1	5IP4030	KMW	200.7 Rev. 4.4
Hardness (Calculated)	02/03/12	1326	02/06/12	1913	120203-5	4IP4037	KMW	200.7 & SM 2340B
Iron, Tot. Rec., ICP	01/30/12	0937	01/30/12	1701	120130-1	5IP4030	KMW	200.7 Rev. 4.4
Lead, Tot. Rec., ICP	01/30/12	0937	01/30/12	1701	120130-1	5IP4030	KMW	200.7 Rev. 4.4
Magnesium, Tot. Rec., ICP	01/30/12	0937	01/30/12	1701	120130-1	5IP4030	KMW	200.7 Rev. 4.4
Manganese, Tot. Rec., ICP	01/30/12	0937	01/30/12	1701	120130-1	5IP4030	KMW	200.7 Rev. 4.4
Mercury, Total	01/31/12	0830	01/31/12	1538	120131-1	1MA3031	JDL	SM 3112B
Nickel, Tot. Rec., ICP	01/30/12	0937	01/30/12	1701	120130-1	5IP4030	KMW	200.7 Rev. 4.4
Potassium, Tot. Rec., ICP	01/30/12	0937	01/31/12	1938	120130-1	5IP4031	KMW	200.7 Rev. 4.4
Selenium, Tot. Rec., ICP	01/30/12	0937	01/30/12	1701	120130-1	5IP4030	KMW	200.7 Rev. 4.4
Silicon as Silica	02/07/12	0900	02/07/12	1556	120207-2	3IP4038	KMW	200.7
Silver, Tot. Rec., ICP	01/30/12	0937	01/30/12	1701	120130-1	5IP4030	KMW	200.7 Rev. 4.4
Sodium, Tot. Rec., ICP	01/30/12	0937	01/30/12	1701	120130-1	5IP4030	KMW	200.7 Rev. 4.4
Thallium, Tot. Rec., ICP	01/30/12	0937	01/30/12	1701	120130-1	5IP4030	KMW	200.7 Rev. 4.4
Zinc, Tot. Rec., ICP	01/30/12	0937	01/30/12	1701	120130-1	5IP4030	KMW	200.7 Rev. 4.4
Alkalinity, as CaCO3 at pH	N/A		01/31/12	1525	120131-1	120131-4	JND	SM 2320B
Ammonia, Total, as N	N/A		01/31/12	1427	120131-5	120131-11	KJH	SM20-4500-NH3 (G)
Chloride	N/A		01/31/12	1756	1IC2031	2IC2031	MLL	300.0
Fluoride	N/A		02/02/12	1650	1IC2033	2IC2033	MLL	300.0
Kjeldahl Nitrogen, as N (T01/30/12)			01/31/12	1328	120130-1	120131-2	JND	EPA 351.2
Nitrate, as N	N/A		01/27/12	1616	1IC2027	1IC2027	MLL	300.0
pH	N/A		01/27/12	1710	120127-1	120127-1	JND	SM 4500H+B
Phosphorus, Total, as P	N/A		02/07/12	1213	120207-1	120207-2	KJH	SM 4500-P(B&F) (M)
Solids, Total Dissolved	N/A		02/02/12	1354	120202-1	120202-1	KJH	SM20th 2540C
Specific Conductance	N/A		02/02/12	1441	120202-1	120202-2	MLL	SM 2510B
Sulfate	N/A		01/31/12	1738	1IC2031	2IC2031	MLL	300.0
Turbidity	N/A		02/15/12	1009	120215-1	120215-1	JND	SM 2130B
Mercury Total Preparation Method								SM 3112B
Total Recoverable Metals Preparation Method								200.7/200.8
Calculated as Hardness Preparation Method								200.7/6010B

Conclusion of Lab Number: 12011835

Appendix

Client: City of Leoti  
Attn: Curtis Kreutzer  
P.O. Box 7E  
Leoti, KS 67861

Date Reported: 02/15/2012  
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Continental File No: 8017  
Continental Order No: 101092

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ND(), where reported, indicates the analyte was not detected above the Limit of Quantitation (LOQ). The concentration of the LOQ is inside the parentheses.

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All samples which require cooling were received at a temperature of less than 6 degrees Celsius.

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The following table presents the date and time sampled, the date and time analyzed, and the total time elapsed for each analysis with an EPA recommended holding time of seventy-two hours or less.

<u>CAS LAB ID #</u>	<u>ANALYSIS</u>	<u>DATE/TIME</u> <u>SAMPLED</u>	<u>DATE/TIME</u> <u>ANALYZED</u>	<u>ELAPSED</u> <u>HRS:MIN</u>
12011835	Nitrate, as N	01/26/2012 1100	01/27/2012 1616	29:16
12011835	pH	01/26/2012 1100	01/27/2012 1710	30:10
12011835	Turbidity	01/26/2012 1100	02/15/2012 1009	479:09

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H - Regulatory analytical holding time for this analysis was exceeded.

QC - QC data qualifiers were noted. See the Quality Control Report.

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## Accreditation Summary

Client: City of Leoti  
Curtis Kreutzer  
P.O. Box 7E  
Leoti, KS 67861

Date Reported: 02/15/2012  
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Continental File No: 8017  
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NELAP accreditation is issued under each EPA regulatory program for a given matrix/analyte/method combination. Continental is NELAP accredited for each matrix/analyte/method and EPA program cited in this Laboratory Report, except for those listed in the table below and for analyses performed in the field. For most of the analyses listed in the table, NELAP accreditation is not offered under the listed EPA program and Continental is NELAP accredited for the analysis, using the same analytical technology, but under a different EPA program. Continental's full NELAP accreditation status may be viewed at [www.kdheks.gov/envlab](http://www.kdheks.gov/envlab). Note that unless qualified otherwise in the Laboratory Report, Continental performs all analyses, including each analysis listed in the table below, utilizing NELAP protocol.

<u>Test Analysis</u>	<u>Matrix-Regulatory Program</u>	<u>Method</u>	<u>CAS NELAP Accredited in Other Reg. Program</u>
CAS is accredited for all analytes.			

Quality Control Report  
Batch Summary

Client: City of Leoti  
Attn: Curtis Kreutzer  
P.O. Box 7E  
Leoti, KS 67861

Date Reported: 02/15/2012  
Date Received: 01/27/2012  
Continental File No: 8017  
Continental Order No: 101092

Test	Testname	QC Batch	Method Blank Date Analyzed	LCS Date Analyzed	MS Lab No. Date Analyzed
SL605	Aluminum, Tot. Rec., ICP	120130-1	120130BLK1	120130LCS1	12011835MS
SL621	Antimony, Tot. Rec., ICP	120130-1	120130BLK1 01/30/12 15:11	120130LCS1 01/30/12 15:15	12011835MS 01/30/12 17:05
Lab numbers associated with this batch: 12011835					
SL609	Arsenic, Tot. Rec., ICP	120130-1	120130BLK1	120130LCS1	12011835MS
SL503	Barium, Tot. Rec., ICP	120130-1	120130BLK1 01/31/12 19:30	120130LCS1 01/31/12 19:34	12011835MS 01/31/12 19:42
Lab numbers associated with this batch: 12011835					
SL604	Beryllium, Tot. Rec., ICP	120130-1	120130BLK1	120130LCS1	12011835MS
SL606	Cadmium, Tot. Rec., ICP	120130-1	120130BLK1	120130LCS1	12011835MS
SL607	Calcium, Tot. Rec., ICP	120130-1	120130BLK1	120130LCS1	12011835MS
SL608	Chromium, Tot. Rec., ICP	120130-1	120130BLK1	120130LCS1	12011835MS
SL613	Copper, Tot. Rec., ICP	120130-1	120130BLK1	120130LCS1	12011835MS
SL626	Iron, Tot. Rec., ICP	120130-1	120130BLK1	120130LCS1	12011835MS
SL611	Lead, Tot. Rec., ICP	120130-1	120130BLK1	120130LCS1	12011835MS
SL631	Magnesium, Tot. Rec., ICP	120130-1	120130BLK1	120130LCS1	12011835MS
SL632	Manganese, Tot. Rec., ICP	120130-1	120130BLK1	120130LCS1	12011835MS
SL636	Nickel, Tot. Rec., ICP	120130-1	120130BLK1 01/30/12 15:11	120130LCS1 01/30/12 15:15	12011835MS 01/30/12 17:05
Lab numbers associated with this batch: 12011835					
SL643	Potassium, Tot. Rec., ICP	120130-1	120130BLK1 01/31/12 19:30	120130LCS1 01/31/12 19:34	12011835MS 01/31/12 19:42
Lab numbers associated with this batch: 12011835					
SL630	Selenium, Tot. Rec., ICP	120130-1	120130BLK1	120130LCS1	12011835MS
SL653	Silver, Tot. Rec., ICP	120130-1	120130BLK1	120130LCS1	12011835MS
SL655	Sodium, Tot. Rec., ICP	120130-1	120130BLK1	120130LCS1	12011835MS
SL620	Thallium, Tot. Rec., ICP	120130-1	120130BLK1	120130LCS1	12011835MS
SL669	Zinc, Tot. Rec., ICP	120130-1	120130BLK1 01/30/12 15:11	120130LCS1 01/30/12 15:15	12011835MS 01/30/12 17:05
Lab numbers associated with this batch: 12011835					
SL333	Mercury, Total	120131-1	120131BLK1 01/31/12 14:28	120131LCS1 01/31/12 14:32	12011667MS 01/31/12 14:52
Lab numbers associated with this batch: 12011835					
SL323	Hardness (Calculated)	120203-5	120203BLK5 02/06/12 19:05	120203LCS5 02/06/12 19:09	12011854MS 02/06/12 19:21
Lab numbers associated with this batch: 12011835					

Quality Control Report  
Batch Summary

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Test	Testname	QC Batch	Method Blank Date Analyzed	LCS Date Analyzed	MS Lab No. Date Analyzed
SL212	Silicon as Silica	120207-2	120207BLK2 02/07/12 15:48	120207LCS2 02/07/12 15:52	12011835MS 02/07/12 16:00
Lab numbers associated with this batch: 12011835					
GL108	Alkalinity, as CaCO3 at pH 4.5	120131-1	120131BLK1 01/31/12 13:48	120131LCS1 01/31/12 13:51	12011842MS 01/31/12 14:53
Lab numbers associated with this batch: 12011835					
GL110	Ammonia, Total, as N	120131-5	120131BLK5 01/31/12 1414	120131LCS5 01/31/12 1415	12011755MS 01/31/12 1425
Lab numbers associated with this batch: 12011835					
GL502	Chloride	1IC2031	BLK1IC2031 01/31/12 11:48	LCS1IC2031 01/31/12 12:07	12011843MS 01/31/12 18:33
Lab numbers associated with this batch: 12011835					
GL501	Fluoride	1IC2033	BLK1IC2033 02/02/12 11:29	LCS1IC2033 02/02/12 11:47	
Lab numbers associated with this batch: 12011835					
GL595	Kjeldahl Nitrogen, as N (TKN)	120130-1	120130BLK1 01/31/12 13:08	120130LCS1 01/30/12 17:21	12011842MS 01/31/12 13:31
Lab numbers associated with this batch: 12011835					
GL505	Nitrate, as N	1IC2027	BLK1IC2027 01/27/12 15:39	LCS1IC2027 01/27/12 15:57	12011835MS 01/27/12 16:34
Lab numbers associated with this batch: 12011835					
GL211	pH	120127-1	120127BLK1 01/27/12	120127LCS1 01/27/12 17:07	12011835MS 01/27/12 17:10
Lab numbers associated with this batch: 12011835					
GL218	Phosphorus, Total, as P	120207-1	120207BLK1 02/07/12 11:58	120207LCS1 02/07/12 11:59	12011651MS 02/07/12 12:08
Lab numbers associated with this batch: 12011835					
GL242	Solids, Total Dissolved	120202-1	120202BLK1	120202LCS1	12011835MS
GL150	Specific Conductance	120202-1	120202BLK1 02/02/12 14:31	120202LCS1 02/02/12 14:31	12011835MS 02/02/12 14:41
Lab numbers associated with this batch: 12011835					

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Quality Control Report  
Batch Summary

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Test	Testname	QC Batch	Method Blank Date Analyzed	LCS Date Analyzed	MS Lab No. Date Analyzed
GL506	Sulfate	1IC2031	BLK1IC2031 01/31/12 11:48	LCS1IC2031 01/31/12 12:07	
Lab numbers associated with this batch: 12011835					
GL275	Turbidity	120215-1	120215BLK1 02/15/12 10:07	120215LCS1 02/15/12 10:08	12011835MS 02/15/12 10:09
Lab numbers associated with this batch: 12011835					

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Client: City of Leoti  
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Quality Control Report  
 Method Blank, LCS, MS/MSD Data

Date Reported: 02/15/2012  
 Date Received: 01/27/2012  
 Continental File No: 8017  
 Continental Order No: 101092

Analysis	Blank Data	% Rec LCS	Limits	Spike Level	Spike Units		Spiked Sample (% Recovery)		Limits	Spike Level	Spiked Sample Precision Data		
					MS	MSD	MS	MSD			Units	RPD	Limit
QC Batch: 120127-1	For sample analyzed on: 01/27/2012			Spiked sample: 12011835									
pH	N/A	99.6	99.0-101	7.0	Std. u	5.06 T	4.97 T	MP #			Std. un	1.8	1.2
QC Batch: 120130-1	For samples prepared on: 01/30/2012 0937			Spiked sample: 12011835									
Aluminum, Tot. Rec., ICP	ND(100)	109	85.0-115	51000	µg/L	105	111	80.0-120	51000	µg/L	5.6	20.0	
Antimony, Tot. Rec., ICP	ND(10)	99.5	85.0-115	500	µg/L	98.4	98.4	80.0-120	500	µg/L	0.0	20.0	
Arsenic, Tot. Rec., ICP	ND(5)	98.9	85.0-115	500	µg/L	101	97.8	80.0-120	500	µg/L	3.2	20.0	
Barium, Tot. Rec., ICP	ND(5)	108	85.0-115	1500	µg/L	103	106	80.0-120	1500	µg/L	2.9	20.0	
Beryllium, Tot. Rec., ICP	ND(2)	105	85.0-115	500	µg/L	104	110.	80.0-120	500	µg/L	5.6	20.0	
Cadmium, Tot. Rec., ICP	ND(2)	96.0	85.0-115	500	µg/L	97.6	97.3	80.0-120	500	µg/L	0.3	20.0	
Calcium, Tot. Rec., ICP	ND(0.5)	108	85.0-115	51.0	mg/L	101	108	80.0-120	51.0	mg/L	6.7	20.0	
Chromium, Tot. Rec., ICP	ND(5)	99.4	85.0-115	500	µg/L	101	103	80.0-120	500	µg/L	2.0	20.0	
Copper, Tot. Rec., ICP	ND(10)	105	85.0-115	500	µg/L	102	103	80.0-120	500	µg/L	1.0	20.0	
Iron, Tot. Rec., ICP	ND(0.1)	103	85.0-115	20.5	mg/L	100.	106	80.0-120	20.5	mg/L	5.8	20.0	
Lead, Tot. Rec., ICP	ND(3)	95.8	85.0-115	500	µg/L	97.0	96.8	80.0-120	500	µg/L	0.2	20.0	
Magnesium, Tot. Rec., ICP	ND(0.1)	101	85.0-115	51.0	mg/L	104	109	80.0-120	51.0	mg/L	4.7	20.0	
Manganese, Tot. Rec., ICP	ND(5)	103	85.0-115	500	µg/L	104	105	80.0-120	500	µg/L	1.0	20.0	
Nickel, Tot. Rec., ICP	ND(5)	94.8	85.0-115	500	µg/L	95.9	95.5	80.0-120	500	µg/L	0.4	20.0	
Potassium, Tot. Rec., ICP	ND(0.3)	108	85.0-115	14.5	mg/L	104	106	80.0-120	14.5	mg/L	1.9	20.0	
Selenium, Tot. Rec., ICP	ND(5)	97.9	85.0-115	500	µg/L	97.5	96.8	80.0-120	500	µg/L	0.7	20.0	
Silver, Tot. Rec., ICP	ND(5)	104	85.0-115	100	µg/L	104	105	80.0-120	100	µg/L	1.0	20.0	
Sodium, Tot. Rec., ICP	ND(0.5)	112	85.0-115	27.5	mg/L	106	117	80.0-120	27.5	mg/L	9.9	20.0	
Thallium, Tot. Rec., ICP	ND(5)	94.0	85.0-115	500	µg/L	95.0	94.9	80.0-120	500	µg/L	0.1	20.0	
Zinc, Tot. Rec., ICP	ND(10)	94.1	85.0-115	500	µg/L	96.4	96.0	80.0-120	500	µg/L	0.4	20.0	
QC Batch: 120130-1	For samples prepared on: 01/30/2012			Spiked sample: 12011842									
Kjeldahl Nitrogen, as N (TKN)	ND(1.0)	109	85.0-115	4.0	mg/L	MN	MN	81.5-133	20.0	mg/L	**	18.3	
Kjeldahl Nitrogen, as N (TKN)	ND(1.0)	N/A			mg/L	MN	MN	81.5-133			**	18.3	
QC Batch: 120131-1	For samples prepared on: 01/31/2012 0830			Spiked sample: 12011667									
Mercury, Total	ND(0.?)	101	80.0-120	5.0	µg/L	MN	MN	80.0-120	5.0	µg/L	**	20.0	
QC Batch: 120131-1	For sample analyzed on: 01/31/2012			Spiked sample: 12011842									
Alkalinity, as CaCO3 at pH 4.	ND(20)	98.0	90.0-110	100	mg/L	MN	MN	#		mg/L	**	2.8	
QC Batch: 120131-5	For sample analyzed on: 01/31/2012			Spiked sample: 12011755									
Ammonia, Total, as N	ND(0.1)	107	91.3-113	1.0	mg/L	MN	MN	75.7-115	1.0	mg/L	**	8.3	
QC Batch: 120202-1	For sample analyzed on: 02/02/2012			Spiked sample: 12011835									
Specific Conductance	ND(3.0)	99.6	95.0-105	1410	µmhos/	399 T	399 T	#		µmhos/c	0.0	0.8	
Solids, Total Dissolved	ND(30)	N/A			mg/L	214 T	228 T	MP #		mg/L	6.3	5.2	
QC Batch: 120203-5	For samples prepared on: 02/03/2012 1326			Spiked sample: 12011854									
Hardness (Calculated)	ND(5.0)	96.9	80.0-120	337	mg/L a	MN	MN	80.0-120	337	mg/L as	**	20.0	
QC Batch: 120207-1	For sample analyzed on: 02/07/2012			Spiked sample: 12011651									
Phosphorus, Total, as P	ND(0.2)	99.4	90.0-110	2.0	mg/L	MN	MN	71.2-135	2.0	mg/L	**	21.2	
QC Batch: 120207-2	For samples prepared on: 02/07/2012 0900			Spiked sample: 12011835									
Silicon as Silica	ND(0.04)	96.5	80.0-120	1.1	mg/L	105	105	80.0-120	1.1	mg/L	0.0	20.0	
QC Batch: 120215-1	For sample analyzed on: 02/15/2012			Spiked sample: 12011835									
Turbidity	ND(0.5)	98.9	90.0-110	4.5	NTU	ND(0.5) T	ND(0.5) T	#		NTU	**	6.4	

Client: City of Leoti  
 Attn: Curtis Kreutzer  
 P.O. Box 7E  
 Leoti, KS 67861

Quality Control Report  
 Method Blank, LCS, MS/MSD Data

Date Reported: 02/15/2012  
 Date Received: 01/27/2012  
 Continental File No: 8017  
 Continental Order No: 101092

Analysis	Blank Data	% Rec LCS	Limits	Spike Level	Units	Spiked Sample (% Recovery)		Limits	Spike Level	Units	Spiked Sample Precision Data	
						MS	MSD				RPD	Limit
QC Batch: 11C2027 Nitrate, as N	For sample analyzed on: 01/27/2012 ND(0.1)	91.5	90.0-110	2.0	mg/L	Spiked sample: 12011835 92.0 87.0		79.3-118	2.0	mg/L	5.6	12.1
QC Batch: 11C2031 Sulfate	For sample analyzed on: 01/31/2012 ND(1.0)	102	90.0-110	8.0	mg/L	Spiked sample: MN MN		81.8-125			**	10.4
QC Batch: 11C2031 Chloride	For sample analyzed on: 01/31/2012 ND(1.0)	107	90.0-110	4.0	mg/L	Spiked sample: 12011843 MN MN		82.1-126	400	mg/L	**	12.5
QC Batch: 11C2033 Fluoride	For sample analyzed on: 02/02/2012 ND(0.1)	90.9	90.0-110	2.0	mg/L	Spiked sample: MN MN		67.3-113			**	9.8

Data Qualifiers:  
 N/A - Not Applicable

- T - MS/MSD cannot be performed for this analysis. The MS result is the same as the sample result. The MSD result is a duplicate of the sample.
- MP - The MS/MSD recoveries for this analyte exceeded the method or laboratory precision control limit. The reported sample concentration is estimated.
- MN - The MS/MSD sample analyses were not performed on a sample from this Continental order number.
- # - Limits not available.
- \*\* - RPD cannot be calculated.

Client: City of Leoti  
 Attn: Curtis Kreutzer  
 P.O. Box 7E  
 Leoti, KS 67861

Quality Control Report  
 Continuing Calibration Data Summary

Date Reported: 02/15/2012  
 Date Received: 01/27/2012  
 Continental File No: 8017  
 Continental Order No: 101092

<u>Analysis</u>	<u>Date of Analysis</u>	<u>Instrument Batch ID</u>	<u>Amount in Standard</u>	<u>Amount Detected</u>	<u>Units</u>	<u>Percent Recovery</u>
Aluminum, Tot. Rec., ICP	01/30/2012	5IP4030	CCV recovery acceptable for this Instrument Batch.			
Aluminum, Tot. Rec., ICP	01/30/2012	6IP4030	CCV recovery acceptable for this Instrument Batch.			
Antimony, Tot. Rec., ICP	01/30/2012	5IP4030	CCV recovery acceptable for this Instrument Batch.			
Antimony, Tot. Rec., ICP	01/30/2012	6IP4030	CCV recovery acceptable for this Instrument Batch.			
Arsenic, Tot. Rec., ICP	01/31/2012	5IP4031	CCV recovery acceptable for this Instrument Batch.			
Arsenic, Tot. Rec., ICP	01/31/2012	6IP4031	CCV recovery acceptable for this Instrument Batch.			
Barium, Tot. Rec., ICP	01/31/2012	5IP4031	CCV recovery acceptable for this Instrument Batch.			
Barium, Tot. Rec., ICP	01/31/2012	6IP4031	CCV recovery acceptable for this Instrument Batch.			
Beryllium, Tot. Rec., ICP	01/30/2012	5IP4030	CCV recovery acceptable for this Instrument Batch.			
Beryllium, Tot. Rec., ICP	01/30/2012	6IP4030	CCV recovery acceptable for this Instrument Batch.			
Cadmium, Tot. Rec., ICP	01/30/2012	5IP4030	CCV recovery acceptable for this Instrument Batch.			
Cadmium, Tot. Rec., ICP	01/30/2012	6IP4030	CCV recovery acceptable for this Instrument Batch.			
Calcium, Tot. Rec., ICP	01/30/2012	5IP4030	CCV recovery acceptable for this Instrument Batch.			
Calcium, Tot. Rec., ICP	01/30/2012	6IP4030	CCV recovery acceptable for this Instrument Batch.			
Chromium, Tot. Rec., ICP	01/30/2012	5IP4030	CCV recovery acceptable for this Instrument Batch.			
Chromium, Tot. Rec., ICP	01/30/2012	6IP4030	CCV recovery acceptable for this Instrument Batch.			
Copper, Tot. Rec., ICP	01/30/2012	5IP4030	CCV recovery acceptable for this Instrument Batch.			
Copper, Tot. Rec., ICP	01/30/2012	6IP4030	CCV recovery acceptable for this Instrument Batch.			
Alkalinity, as CaCO3 at pH 4.5	01/31/2012	120131-4	CCV recovery acceptable for this Instrument Batch.			
Alkalinity, as CaCO3 at pH 4.5	01/31/2012	120131-5	CCV recovery acceptable for this Instrument Batch.			
Ammonia, Total, as N	01/31/2012	120131-11	CCV recovery acceptable for this Instrument Batch.			
Ammonia, Total, as N	01/31/2012	120131-12	CCV recovery acceptable for this Instrument Batch.			
Specific Conductance	02/02/2012	120202-2	CCV recovery acceptable for this Instrument Batch.			
Specific Conductance	02/02/2012	120202-3	CCV recovery acceptable for this Instrument Batch.			
pH	01/27/2012	120127-1	CCV recovery acceptable for this Instrument Batch.			
pH	01/27/2012	120127-2	CCV recovery acceptable for this Instrument Batch.			
Phosphorus, Total, as P	02/07/2012	120207-2	CCV recovery acceptable for this Instrument Batch.			
Phosphorus, Total, as P	02/07/2012	120207-3	CCV recovery acceptable for this Instrument Batch.			
Turbidity	02/15/2012	120215-1	CCV recovery acceptable for this Instrument Batch.			
Turbidity	02/15/2012	120215-2	CCV recovery acceptable for this Instrument Batch.			
Fluoride	02/02/2012	2IC2033	CCV recovery acceptable for this Instrument Batch.			
Fluoride	02/02/2012	3IC2033	CCV recovery acceptable for this Instrument Batch.			
Chloride	01/31/2012	2IC2031	CCV recovery acceptable for this Instrument Batch.			
Chloride	01/31/2012	3IC2031	CCV recovery acceptable for this Instrument Batch.			
Nitrate, as N	01/27/2012	1IC2027	CCV recovery acceptable for this Instrument Batch.			
Nitrate, as N	01/27/2012	2IC2027	CCV recovery acceptable for this Instrument Batch.			
Sulfate	01/31/2012	2IC2031	CCV recovery acceptable for this Instrument Batch.			
Sulfate	01/31/2012	3IC2031	CCV recovery acceptable for this Instrument Batch.			
Kjeldahl Nitrogen, as N (TKN)	01/31/2012	120131-2	CCV recovery acceptable for this Instrument Batch.			
Kjeldahl Nitrogen, as N (TKN)	01/31/2012	120131-3	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	02/06/2012	4IP4037	CCV recovery acceptable for this Instrument Batch.			
Hardness (Calculated)	02/06/2012	5IP4037	CCV recovery acceptable for this Instrument Batch.			
Iron, Tot. Rec., ICP	01/30/2012	5IP4030	CCV recovery acceptable for this Instrument Batch.			

Client: City of Leoti  
 Attn: Curtis Kreutzer  
 P.O. Box 7E  
 Leoti, KS 67861

Quality Control Report  
 Continuing Calibration Data Summary

Date Reported: 02/15/2012  
 Date Received: 01/27/2012  
 Continental File No: 8017  
 Continental Order No: 101092

Iron, Tot. Rec., ICP	01/30/2012	6IP4030	CCV recovery acceptable for this Instrument Batch.
Lead, Tot. Rec., ICP	01/30/2012	5IP4030	CCV recovery acceptable for this Instrument Batch.
Lead, Tot. Rec., ICP	01/30/2012	6IP4030	CCV recovery acceptable for this Instrument Batch.
Magnesium, Tot. Rec., ICP	01/30/2012	5IP4030	CCV recovery acceptable for this Instrument Batch.
Magnesium, Tot. Rec., ICP	01/30/2012	6IP4030	CCV recovery acceptable for this Instrument Batch.
Manganese, Tot. Rec., ICP	01/30/2012	5IP4030	CCV recovery acceptable for this Instrument Batch.
Manganese, Tot. Rec., ICP	01/30/2012	6IP4030	CCV recovery acceptable for this Instrument Batch.
Mercury, Total	01/31/2012	1MA3031	CCV recovery acceptable for this Instrument Batch.
Mercury, Total	01/31/2012	2MA3031	CCV recovery acceptable for this Instrument Batch.
Nickel, Tot. Rec., ICP	01/30/2012	5IP4030	CCV recovery acceptable for this Instrument Batch.
Nickel, Tot. Rec., ICP	01/30/2012	6IP4030	CCV recovery acceptable for this Instrument Batch.
Potassium, Tot. Rec., ICP	01/31/2012	5IP4031	CCV recovery acceptable for this Instrument Batch.
Potassium, Tot. Rec., ICP	01/31/2012	6IP4031	CCV recovery acceptable for this Instrument Batch.
Selenium, Tot. Rec., ICP	01/30/2012	5IP4030	CCV recovery acceptable for this Instrument Batch.
Selenium, Tot. Rec., ICP	01/30/2012	6IP4030	CCV recovery acceptable for this Instrument Batch.
Silicon as Silica	02/07/2012	3IP4038	CCV recovery acceptable for this Instrument Batch.
Silicon as Silica	02/07/2012	4IP4038	CCV recovery acceptable for this Instrument Batch.
Silver, Tot. Rec., ICP	01/30/2012	5IP4030	CCV recovery acceptable for this Instrument Batch.
Silver, Tot. Rec., ICP	01/30/2012	6IP4030	CCV recovery acceptable for this Instrument Batch.
Sodium, Tot. Rec., ICP	01/30/2012	5IP4030	CCV recovery acceptable for this Instrument Batch.
Sodium, Tot. Rec., ICP	01/30/2012	6IP4030	CCV recovery acceptable for this Instrument Batch.
Thallium, Tot. Rec., ICP	01/30/2012	5IP4030	CCV recovery acceptable for this Instrument Batch.
Thallium, Tot. Rec., ICP	01/30/2012	6IP4030	CCV recovery acceptable for this Instrument Batch.
Zinc, Tot. Rec., ICP	01/30/2012	5IP4030	CCV recovery acceptable for this Instrument Batch.
Zinc, Tot. Rec., ICP	01/30/2012	6IP4030	CCV recovery acceptable for this Instrument Batch.

- Laboratory Report Conclusion -



CONTINENTAL ANALYTICAL SERVICES, INC.  
P.O. BOX 3737 - 525 N. EIGHTH STREET  
SALINA, KS 67402-3737 - 785/827-1273  
FAX: 785/823/7830

CAS ORDER NO. 101092

SHIPPING ORDER NO.: 45747

Date Requested: 12/16/2011  
Requested By: Alan  
Received By: PMC

CAS File 8017  
Event Type: Once  
Next Event: 12/16/2011

SHIP TO:

City of Leoti  
Curtis Kreutzer  
406 South 4th  
Leoti, KS 67861

Cooler: 3678

Ship Via: UPS


Project:  
CAS Price Quote:

QUANTITY			SAMPLE CONTAINERS		
No. Samp.	Cont/Samp.	Total Cont.	Container Type	Preservative	Test Assignment
1	1	1	500mL Plastic	HNO3	Metals
1	1	1	1000mL Plastic	None	Alk, , Cl, NO3, pH, TDS, SO4, F1
1	1	1	250mL Plastic	H2SO4	NH3, Total P, TKN

Date Required at Destination: 12/19/2011

Client Instructions:

Enclosures: Chain of Custody, Custody Seals, Labels,

Order Completed By: mt Date Completed: 12-16-11 Checked By: 

To meet analytical holding times, please return via overnight courier. Place ice in bags provided when returning samples to laboratory. Please return shipping order and PLACE TEMPERATURE BLANK IN COOLER when returning.

See attached Sample Acceptance Policy.

Continental's Standard Terms and Conditions of Sale will apply to all samples received unless a separate contractual agreement has been made.

For CAS use only: Mark cooler Treated Water

Continental Analytical Services, Inc.  
Cooler/Sample Receipt Form ( C/S RF )

CAS Order No.: 101092

Client Name: Lecti

CAS File No.: 807

Sample ID's in cooler: S-202

Cooler 1 of 1 for this CAS Order No.

Cooler Identification: CAS Cooler #: 3678 / Client's Cooler / Box / Letter / Hand-delivered  
Other: \_\_\_\_\_

Date/Time Cooler Received: 1 / 27 / 12 9 : 30

Delivered By:  UPS / FedX / AB Express / Field Svcs / Mail / Walk-In / Other: \_\_\_\_\_

Custody Seal:  Present /  Intact / Broken Absent: \_\_\_\_\_ Seal No: NA

Seal Name: DL Seal Date: 1-26-12

Seal matches Chain of Custody: Yes / No /  N/A

Type of Packing Material: Blue Ice  Ice / Melted Ice  Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: \_\_\_\_\_

Cooler Temperature (°C): Original Reading (°C) 1.4 Corrected Reading (°C) 1.8

Temp. By:  Temp Blank Cooler Surface: Glass / Plastic / Metal / Other: \_\_\_\_\_

Thermo. ID No.: 585 Thermo. Correction Factor (°C): 0.4

Evidence of Cooling and date received = date sampled

Sample Receipt Discrepancies:  No  Yes (See below for discrepancies.)

Note: If discrepancies are present, CAS will proceed with analyses until/unless directed otherwise by the client.

- |  |   |
|--|---|
| <input type="checkbox"/> Chain of Custody not present - information taken from:<br>Cover Letter <input type="checkbox"/> Container <input type="checkbox"/><br>PO <input type="checkbox"/> CAS Proj. Mgr. <input type="checkbox"/> | <input type="checkbox"/> Sample excluded from Chain of Custody  |
| <input type="checkbox"/> Container label absent  | <input type="checkbox"/> Sample listed on Chain of Custody, not received  |
| <input checked="" type="checkbox"/> Chain of Custody incomplete [see detail below]   | <input type="checkbox"/> Sample description on container and Chain of Custody do not agree  |
| <input checked="" type="checkbox"/> Chain of Custody missing <u>date/time</u> sampled (excl. TB or Dup.)   | <input type="checkbox"/> Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]   |
| <input type="checkbox"/> Date or Time sampled obtained from container label  | <input type="checkbox"/> Cooler temperature exceeded 0.1 - 6.0 °C requirement<br>[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.] |
| <input type="checkbox"/> Chain of Custody missing sampler's name   | <input type="checkbox"/> Broken or leaking containers (detail actions below)  |
| <input checked="" type="checkbox"/> Chain of Custody missing matrix (sample type)  | <input type="checkbox"/> Sample container type or labeled chemical preservation inappropriate   |
| <input type="checkbox"/> Missing relinquished information: signature date time   | <input type="checkbox"/> Other discrepancies: _____   |

Detail to discrepancies/comments: no sample ID on coc - Treated Water taken from bottle label 1-26-12 - 11:00 AM

no tests on coc

Parameters taken from  
JC # 45747 + quote # 1112-04  
pme 01/27/12

Completed by: mws Date Completed: 1-27-12