

TEXAS WATER DEVELOPMENT BOARD

P.O. BOX 13231, CAPITOL STATION

AUSTIN, TX 78711-3231

2022 WATER AUDIT REPORT

A. Water Utility General Information

1. Water Utility Name	<u>CITY OF LULING</u>		
1a. Regional Water Planning Area	<u>L</u>		
1b. Address	<u>509 E CROCKETT ST</u>		
	<u>LULING, TX 78648-2603</u>		
2. Contact Information			
2a. Name	<u>Bill Schulle</u>	Have you completed Water Loss Auditor Training?	
2b. Telephone Number	<u>(512) 738-0782</u>	<input checked="" type="radio"/> Yes	
2c. Email Address	<u>wastewatersuper@cityofluling.net</u>	<input type="radio"/> No	
3. Reporting Period			
3a. Start Date	<u>01/01/2022</u>		
3b. End Date	<u>12/31/2022</u>		
4. Source Water Utilization			
4a. Surface Water	<u>100.00</u>	%	
4b. Ground Water	<u>0.00</u>	%	
5. Population Served			
5a. Retail Population Served	<u>7,364</u>		Assessment Scale
5b. Wholesale Population Served	<u>0</u>		
6. Utility's Length of Main Lines	<u>250.00</u>	miles	<u>1.5</u>
7. Total Retail Metered Connections - Active and Inactive	<u>2,478</u>		
7b. Service Connections	<u>2,478</u>		<u>1.5</u>
8. Number of Wholesale Connections Served	<u>0</u>		
9. Service Connection Density	<u>9.91</u>	connections per mile	
10. Average Yearly System Operating Pressure	<u>65.00</u>	psi	<u>1.5</u>
11. Volume Units of Measure	<u>Gallons</u>		

B. System Input Volume

12. Volume of Water Intake	<u>293,061,000</u>	gallons	
13. Produced Water	<u>293,061,000</u>	gallons	<u>1.5</u>
13a. Production Meter Accuracy	<u>99.00</u>	%	<u>1.5</u>
13b. Corrected Input Volume	<u>296,021,212</u>	gallons	
14. Total Treated Purchased Water	<u>0</u>	gallons	<u>1.5</u>
14a. Treated Purchased Water Meter Accuracy	<u>99.00</u>	%	<u>1.5</u>

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14b. Corrected Treated Purchased Water Volume	0	gallons	
15. Total Treated Wholesale Water Sales	0	gallons	1.5
15a. Treated Wholesale Water Meter Accuracy	99.00	%	1.5
15b. Corrected Treated Wholesale Water Sales Volume	0	gallons	
16. Total System Input Volume Line 13b + Line 14b - Line 15b	296,021,212	gallons	
			Assessment Scale
C. Authorized Consumption			
17. Billed Metered	253,249,000	gallons	1.5
18. Billed Unmetered	0	gallons	1.5
19. Unbilled Metered	0	gallons	1.5
20. Unbilled Unmetered	633,123	gallons	1.5
21. Total Authorized Consumption	253,882,123	gallons	
D. Water Losses			
22. Water Losses Line 16 - Line 21	42,139,089	gallons	
E. Apparent Losses			
23. Average Customer Meter Accuracy	99.00	%	1.5
24. Customer Meter Accuracy Loss	2,558,071	gallons	
25. Systematic Data Handling Discrepancy	633,123	gallons	1.5
26. Unauthorized Consumption	633,123	gallons	1.5
27. Total Apparent Losses	3,824,317	gallons	
F. Real Losses			
28. Reported Breaks and Leaks	0	gallons	1.5
29. Unreported Loss	38,314,772	gallons	1.5
30. Total Real Losses Line 28 + Line 29	38,314,772	gallons	
31. Total Water Losses Line 27 + Line 30	42,139,089	gallons	
32. Non-Revenue Water Line 31 + Line 19 + Line 20	42,772,212	gallons	
G. Technical Performance Indicator for Apparent Loss			
33. Apparent Losses Normalized Line 27 / Line 7b / 365	4.23	gallons lost per connection per day	

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H. Technical Performance Indicators for Real Loss

34. Real Loss Volume	38,314,772	gallons
Line 30		
35. Unavoidable Annual Real Losses Volume	0	gallons
(5.41 * Line 6 + (Line 7b * 0.15)) * 365 * Line 10		
36. Infrastructure Leakage Index	0.00	I.L.I
Line 34 / Line 35		
37. Real Losses Normalized - Service Connections	42.36	gallons lost per connection per day
Line 34 / Line 7b / 365		
38. Real Losses Normalized - Main Lines	419.89	gallons lost per mile per day
Line 34 / Line 6 / 365		

I. Financial Performance Indicators

			Assessment Scale
39. Total Apparent Losses	3,824,317	gallons	
Line 27			
40. Retail Price of Water	0.00365	\$/gallons	1.5
41. Cost of Apparent Losses	\$13,959		
Line 39 x Line 40			
42. Total Real Losses	38,314,772	gallons	
Line 30			
43. Variable Production Cost of Water	0.002240	\$/gallons	1.5
44. Cost of Real Losses	\$85,825		
Line 42 x Line 43			
45. Total Cost Impact of Apparent and Real Losses	\$99,784		
Line 41 + Line 44			
46. Total Assessment Score	30		

J. System Losses and Gallons Per Capita per Day (GPCD)

47. Total Water Loss per Connection per Day	46.59	gallons
Line 22 / Line 7b / 365	110	
48. GPCD Input		
Line 16 / Line 5a / 365	16	
49. GPCD Loss		
Line 31 / Line 5a / 365		

K. Wholesale Factor Adjustments

50. Percent of Treated Wholesale Water Traveling through General Distribution System	0.00	%
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51. Volume of Treated Wholesale Water Traveling through General Distribution System (Line 50/100) * Line 15b	<u>0</u>	gallons
52. Wholesale Factor Line 15b / (Line 13b + Line 14b)	<u>0.00</u>	
53. Adjusted Real Loss Volume ((1 - Line 52) x (Line 30 * Line 50 / 100)) + (Line 30 - (Line 30 * Line 50/100))	<u>38,314,772</u>	gallons
54. Adjusted Cost of Real Losses ((1 - Line 52) x (Line 44 * Line 50 / 100)) + (Line 44 - (Line 44 * Line 50/100))	<u>\$85,825</u>	
55. Adjusted Total Water Loss Volume ((1 - Line 52) x (Line 31 * Line 50 / 100)) + (Line 31 - (Line 31 * Line 50/100))	<u>42,139,089</u>	gallons
56. Adjusted Total Cost Impact of Apparent and Real Losses ((1 - Line 52) x (Line 45 * Line 50 / 100)) + (Line 45 - (Line 45 * Line 50/100))	<u>\$99,784</u>	
57. Adjusted Real Loss Per Connection ((1 - Line 52) x (Line 37 * Line 50 / 100)) + (Line 37 - (Line 37 * Line 50/100))	<u>42.36</u>	gallons lost per connection per day
58. Adjusted Real Loss Per Mile ((1 - Line 52) x (Line 38 * Line 50 / 100)) + (Line 38 - (Line 38 * Line 50/100))	<u>419.89</u>	gallons lost per mile per day
59. Adjusted Infrastructure Leakage Index ((1 - Line 52) x (Line 36 * Line 50 / 100)) + (Line 36 - (Line 36 * Line 50/100))	<u>0.00</u>	I.L.I
60. Adjusted Total Water Loss Per Connection Per Day (((1 - Line 52) x (Line 37 * Line 50 / 100)) + (Line 37 - (Line 37 * Line 50/100))) + Line 33	<u>46.59</u>	gallons
61. Adjusted GPCD Loss ((1 - Line 52) x (Line 49 * Line 50 / 100)) + (Line 49 - (Line 49 * Line 50/100))	<u>16</u>	

Comments