COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC INVESTIGATION INTO EXCESSIVE)	
WATER LOSS BY KENTUCKY'S)	CASE NO.
JURISDICTIONAL WATER UTILITIES)	2021-00339

RESPONSE TO COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION

North Manchester Water Association ("NMWA") provides the following response to the Commission Staff's Second Request for Information, attached hereto as Appendix A. The witness responsible for each response is NMWA Manager Rose Lewis.

Respectfully submitted,

Sturgill, Turner, Barker & Moloney, PLLC M. Todd Osterloh 333 West Vine Street, Suite 1500 Lexington, KY 40507 Telephone No. (859) 255-8581 Fax No. (859) 231-0851 tosterloh@sturgillturner.com

APPENDIX A

1. Refer to North Manchester Water's Responses to Appendix H of the November 22, 2019 Order, filed September 23, 2020 (North Manchester Water's Response), Item 1.a. Provide an update on the number of thefts that have been discovered and the number that have been prosecuted.

Response: Three thefts had been discovered in 2020. None were prosecuted. Four thefts have been discovered in 2021 through September. None have been prosecuted as of this date. All meters in question have been removed from the ground. We have noticed significant rises of water usage on five Fridays in a row with usage being normal on Friday and Sunday but NMWA has not been able to identify where the water was going.

2. Refer to North Manchester Water's Response, Exhibit E, Water Audit. Exhibit E includes monthly water loss forms.

a. The first sentence in the response states that the average water loss for 2019 is 4399 percent. Explain whether this figure should read 43.99 percent.

Response: The figure should read 49.31 percent.

b. The January 2019 form states that the water loss was 49.31 percent, however, February 2019 the water loss was 9.04 percent, and the March 2019 the loss was 52.06 percent. A review of each month in 2019 and 2020 illustrates the water loss percentage appears to fluctuate from the low of 9.04 percent (March 2019) to the high of 61.07 percent (January 2020). Explain how the information that was entered into the monthly water loss forms that North Manchester Water relied upon to develop the water line loss percentage in each water loss form.

Response: February 2019 water loss of 9.04 percent is believed to be correct based on NMWA daily master meter readings. The City of Manchester disputed their own readings and requested calibration of the master which NMWA paid for and all master meters are within acceptable range as tested by the CI Thornburg co. Please see attached letter to the City of Manchester.

c. Provide the job title and name of the individual whose job is responsible for the information provided in these water loss forms.

Response: Bill Gray, field supervisor and Rose Lewis, Manager

d. Explain the procedures that are in place to ensure all the information in these water loss forms are correct and accurate.

Response: Master meters are read daily, flushing reports and fire department water usage is turned to Rose Lewis for final reporting.

e. In North Manchester Water's Response, Exhibit E, North Manchester Water stated, "the water loss is trending to our goal of 20 percent."

(1) Explain this statement due to the wide range of fluctuations of the water line loss percentages in these water loss forms.

Response: We have noticed large water use on five Fridays in a row by the master meter readings but have yet to locate where the water is being used. Thursday and Saturday readings are normal.

(2) Provide the September 2020 water loss form.

Response: Please see attached.

f. Explain why there are only three months (April–June 2020) out of a 20-month series of water loss reports with Excavation Damages water loss and no Line Break water loss.

Response: Amounts inadvertently placed in wrong column. Therefore, there should not be any excavation damages by contractors.

(1) Explain if the contractors or individuals that cause the damage to the water mains are being billed for the lost water.

Response: Contractors are billed off the tariff.

(2) Provide the rate at which the lost water is billed if the contractors or individuals that cause the damage to the water mains are being billed.

Response: Contractors are billed off the tariff for water.

(3) Explain if the contractors or individuals that cause the damage to the water mains are not being billed.

Response: Contractors are billed.

g. Explain how the water loss amounts for Line Breaks, Line Leaks, and Excavation Damages are determined each month.

Response: Work orders for each leak and found line breaks are estimated based on the size of the pipe and duration of the leak.

h. Explain how Line Breaks, Line Leaks, and Excavation Damages to the older asbestos cement mains are repaired.

Response: Asbestos cement line breaks are repaired using couplings specific to asbestos cement pipe

i. Provide the Board of Director's meeting minutes showing that the utility has determined that, "The benefits to replace to be more beneficial compared to continuing making repairs once they have occurred." Also, provide an update on the current status of this project.

Response: The NMWA has requested funds from the cares act to fund this project.

3. Refer to North Manchester Water's Response, Exhibit E.

a. Provide the numerical data that has been used to calculate the totals in the category of Line Break Loss for each month that is listed on the water loss form provided in this exhibit.

Response: Please see attached work orders.

b. Provide the numerical data that has been used to calculate the totals in the category of Line Leak Loss for each month that is listed on the water loss form provided in this exhibit.

Response: Please see attached work orders.

c. Provide the numerical data that has been used to calculate the totals in the category of Excavation Damages Loss for each month that is listed on the water loss form provided in this exhibit.

Response: Not applicable. There was an error in which column submitted.

4. Refer to North Manchester Water's Response, Exhibit F. Explain whether and when North Manchester Water intends to amend its tariff regarding fire department usage reporting.

Response: NMWA intends to file additional penalty with the fire departments during the next rate increase.

5. Refer to North Manchester Water's response, Exhibit G.

a. Explain the response "Accounts Payable are taken care of by an outside accountant."

Response: Accounts payables are now received by the office personal and daily receipts and deposits are made by the office personnel

(1) Provide the name and business address of the outside accountant.

Response: Ted Woods , CPA, 305 Main Street , Manchester, KY 40962

(2) Explain whether the outside accountant has any additional relationship with North Manchester Water.

Response: Mr. Woods is a current board member. It

(3) Explain whether this accountant acts as North Manchester Water's collection agent.

Response: No.

b. Provide any contract or documentation that explains duties of this outside accountant and how this outside accountant takes care of the accounts payable.

Response: There is no written contract detailing the scope of services.

- 6. Refer to North Manchester Water's response, Exhibit I.
- a. Provide the date when this Emergency Response Information was compiled.

Response: January 2020

b. Provide the date when this Emergency Response Information was updated.

Response: January 2021

7. Refer to North Manchester Water's Response. Provide an update for the recommendations and Orders given to all parties of Case No. 2019-00041 in the Commission's Order entered November 22, 2019, specifically those on pages 6, 7, and 8.

Response:

1. NMWA has identified areas to install zone meters and included in proposed projects for which NMWA is soliciting funding.

2. We have identified areas in the distribution system that needs more isolation valves and are installing them as we can afford.

3. NMWA is aware of the need to have specific employees that work directly on leak detection and have hired a new employee who s duty is specifically to look for leaks. Since his employment he has aided the repair of approximately 42 leaks. He has been employed since August 9, 2021.

4. NMWA has tested and replaced the required amount of 100 meters for the year.

5. NMWA has evaluated the need for a rate increase each year and determined the amount necessary.

6. NMWA has designated its office manager as responsible party for water loss and leak detection.

8. Refer to North Manchester Water's Response, Exhibit E. Explain whether North Manchester Water has evaluated its need for a base rate increase in reference to the findings in Exhibit E and its statement that it plans to solicit funding to replace aging infrastructure.

Response: NMWA has evaluated its rates and needs a base rate increase. The nmwa has identified specific projects of need and is currently soliciting funding for those projects. It has requested funding for the following projects: WX21051020, WX21051202, WX21051010.

9. Explain whether North Manchester Water has developed a written plan to improve the operations and financial health of the utility, and if so, provide the plan. Provide the Board minutes for the Board approval of the written plan to improve North Manchester Water's operations and financial health.

Response: NMWA has developed a written plan to improve the operations and financial health. The plan is currently being reviewed by the commissioners and should be approved at the December board meeting since the November meeting did not have a quorum. We will provide the plan after the board's approval.

10. Explain whether North Manchester Water has developed a written water loss detection plan, and if so, provide the plan.

Response: NMWA has developed a written water loss plan.

NMWA plans to continue to replace aged water meters. Make sure all large meters are calibrated and replace the old and ageing ones. The NMWA is evaluating its water loss tracking record keeping. We are working with our local fire departments to improve theirs and our record keeping. We are also trying to improve the way that we are keeping track of our system flushing. We are planning on installing zone meters throughout the system to help evaluate water loss. Therefore, we will be able to calculate water loss on a zoned basis. We have hired a new employee to help with leak detection and budget monies to help repair know problems areas. We have created a new program of leak repair. Once the leak has been identified, we enter a work order and our crews usually make repairs within 3 to 5 days of discovery. We are continuing to improve our water loss accounting and reporting.

11. Explain whether the written water loss detection plan, if one has been developed, accounts for sufficient personnel to staff the needs of the plan.

Response: The water loss plan includes the need and accounts for sufficient personnel needed to address the needs of the plan.

01561299.DOCX

Exhibit 2b

North Manchester Water Assn 7361 North Hwy 421 Manchester KY 6065985403

City of Manchester Water and Sewer

207 Church Street

Manchester, KY 40962

Attention: James Ed Garrison, Mayor

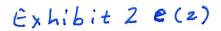
Please be advised that we have reviewed our October Water bill and it appears that based on the present and previous usage for the US 421 master meter calculations are not correct. The bill usage amount is **13,966,000** gallons but if you subtract the present meter reading of 94990500 from the previous meter reading of 94495400 it totals **495,100** gallons. Please review and advise.

Please note that we have reviewed the SR 638 master meter and SR 11 master meter gallons and billed amount and they are correct.

Thanks Steve Davis

President

Exhibit 2(e)(2)



PUBLIC SERVICE COMMISSION

Monthly Water Loss Report

Water	Utility:	North Manchester Water Assn.		
For the	Month of:	September	Year:	2020
LINE #		ITEM	GAL	LONS (Omit 000's)
1	WATER PRODUCED A			
2	Water Produced			
3	Water Purchased			13,619
4		TOTAL PRODUCED AND PURC	HASED	13,619
5				
6	WATER SALES			
7	Residential			9,227
8	Commercial			
9	Industrial			
10	Bulk Loading Stations			
11	Wholesale			
12	Public Authorities			
13	Other Sales (explain) _			
14		TOTAL WATER	SALES	9,227
15				
16	OTHER WATER USED			
17	Utility and/or Water Tre	atment Plant		
18	Wastewater Plant			
19	System Flushing			45
20	Fire Department			
21	Other Usage (explain)_			
22		TOTAL OTHER WATER	RUSED	45
23				
24	WATER LOSS			
25	Tank Overflows			47
26	Line Breaks			17
27	Line Leaks	2		4,330
28	Excavation Damages			
29	Theft			
30	Other Loss (explain)	TOTAL MATER		1 217
31		TOTAL WATER	K LU33	4,347
32	Note: Line 14 ± 1 inc 22	2 + Line 31 MUST Equal Line 4		
33	NOTE: LINE 14 T LINE 22			
34	WATER LOSS PERCE	NTAGE		
35				31.92%
36	(Line 31 divided by Line	; 4)		31.92%

Exhibit 3

Account Number:	Wayne Byrd Reed Branch	
Physical Address	Location Number	
Description of Work Needed	Route Number	
	Special Instructioner	
 Mieter 80x Replacement	Special Instructions:	
Vieter Lid Replacement		
Weter Reading Re-Check		
Leak Repair		
Customer Assistance		
Othar		
Eculoment Used	Work Completed BY	.eak Repair Info
Unit 1 Unit 5 CAT 8: Unit 2 Unit 6	7/	allure Type
	in the second seco	uration
		25 hours DRIM 35
arts Used		otal -5,250
1 foot piece of 2 inch		

Vehicle Mileage: _____

fustin Thoyson

Date: Tin	ne:
Customer Name / Location: Account Number:	Danny Garrett neighbor /421 Location Number
Physical Address	Route Number
Description of Work Needed	
Meter Relocation	Special Instructions:
Meter Lid Replacement	
Meter Reading Re-Chack	
Leak Repair Customer Assistance	
	Morit Completed BY Leak Repair Info ackhos JA Pailure Type DT Service DT Duration DX JWA GPM 30
Parts Used <u>12 3/4" W Cap</u>	Total-302,400
Time Arrived at Location: Time Departed Location: Date Work Completed: Vehicle Mileage:	Musta Mongoon

Date: 7	lme:	
Customer Name / Location:	Huckleberry	
Account Number:		
Physical Address		
Description of Work Needed		
Meter Relocation	Special Instructions:	
Meter Box Replacement		
Meter Lid Replacement		
Meter Reading Re-Check		
Leak Repair		
Customer Assistance		ne za za za na na na na dela na 32 ME u kanaka na kaka kaka kaka kata kata kata
Other		
<u>Equipment Used</u>	Work Con	npieted BY Lesk Repair Info
Unit 2 Unit 6 Unit 6 Unit 7 Air 0	Backhos A	Fallure Type
Paris Used JX 3/4" straight cooplings 5 foot piece of 3/4" Yind		Total - 1500
A root hiere DE NT. IVY	5 	
Time Arrived at Location: Time Departed Location: Date Work Completed:	////	Complete Cover
Vehicle Mileage:		1

Date: Time:	
Customer Name / Location:Ells Branch	
Account Number: Loc	
Physical Address	Route Number
Description of Work Needed	
Meter Relocation Special Instru	ctions:
L Meter Box Replacement	
Meter Lid Replacement	
Meter Seading Pourbook	
Leak Repair	
Customer Assistance	
Other	
Equipment Used Unit 1 Unit 5 CAT Backhos Unit 2 Unit 6 Unit 3 Unit 7 Air Compressor Unit 4 Unit 8 Other	GPIVI 50
2 foot 6" clamp	Total-0074,000
20 Foot piece of 6" PVC	
Time Arrived at Location: Time Departed Location: Date Work Completed: Vehicle Willes ac:	Work Order Completed suff

Date: Time:		
Customer Name / Location: Charlie	Sizemore Stevens	Rd
Account Number:	Location Number	
Physical Address	Pouto Number	
Description of Work Needed	nodre Numper	
Denter D. J.	inutions.	
	tructions:	
Meter Lid Replacement		
Meter Reading Re-Charle		
Leak Repair		
Customer Assistance		
Other		
Eculoment Used Unit 1 Unit 5 CAT Backhos Unit 2 Unit 6 Unit 5 Unit 7 Air Compressor Unit 4 Unit 8 Other	Morit Completed BY	Leak Repair Info Failure Type Service Duration <u>a hours</u> GPM <u>30</u>
Paris Used JX Straight couplings 1 toot 3/4" line		Potal-3600
fime Arrived at Location: fime Departed Location: Date Work Completed: /ehicle Milleage:	Work Oylige Compleged o	



Date:Time:	
Customer Name / Location:	Dera End of Charlie Sizemore /638
Physical Address	Location NumberRoute Number
	cial instructions:
Equipment Used Unit 1 Unit 5 CAT Backho Unit 2 Unit 6 Unit 3 Unit 7 Air Compres Unit 4 Unit 8 Other Parts Used $50 - 50 - 3/4'' line 2 \times 3/4'' straight coopling s$	ssor DC Failure Type
Time Arrived at Location: Time Departed Location: Date Work Completed: Vehicle Mileage:	Work Order Completer for

/ Work Order		
Date:Time:		
Customer Name / Location:	Greek Grag hill K	e d
Account Number: Physical Address	_Location Number	
Physical Address Description of Work Needed	Route Number	
N/ miner is a l	nstructions:	
Meter Lid Replacement		
Equipment Used Unit 1. Unit 5 CAT Backhoe Unit 2. Unit 5 Unit 3. Unit 7 Unit 4. Unit 7 Unit 4. Unit 8 Other	SA DI DK AS	Leak Repair Info Failure Type Service Duration 3 weeKs
Paris Used		GPM 15 Tot 41 - 453,600
Time Arrived at Location: Time Departed Location: Date Work Completed: Vehicle Mileage:	Work Order completed by:	

Date: Tin	ne:
Customer Name / Location:/	11/Gabbards Forth
Account Number:	Location Number
Physical Address	Route Number
Description of Work Needed	
Meter Relocation	Special Instructions:
Meter Box Replacement	
Meter Lid Replacement	
Meter Reading Re-Check	
Leak Repair Customer Assistance	
	Work Completed SY Leek Repair Info ckhos DA Fallure Type oprassor DI Strvicc DI DI Duration 05 SD GPM 15 10 Image: Structure Structure Structure
Fime Arrived at Location: Fime Departed Location: Date Work Completed: /ehicle Mileage:	Master Thomason

Date: <u>6-25-21</u> Time:	
Customer Name / Location:	
Account Number:	_Location Number
Physical Address	
Description of Work Needed	
Meter Relocation Special In	istructions: bottom meter bottom,
	ged met
Meter Lid Replacement	
Meter Reading Re-Check	
Leak Repair	
Customer Assistance	
Other	
Equipment Used	Work Completed 8Y Leak Repair Info
Unit 1 Unit 5 CAT Backhos	DT Failure Type DT Maler
Unit 9 Unit 7 Air Compressor Unit 4 Unit 8 Other	Duration
Parts Used	Total - 201,600
/X meter	
	A
Time Arrived at Location: Time Departed Location:	Work Ørder Completed by
Date Work Completed:	With Ampion Panen mata Within allal
Vehicle Willeage:	A start for all the

Date: 6-16-21 TI	me:				
Customer Name / Location: Account Number: Physical Address	Kenneth	Lunsford cation Number	1*		
Description of Work Needed Meter Relocation Meter Box Replacement Meter Lid Review	Special Instru	ctions: <u>rep</u> e	aired =	3/41" service	line
Meter Lid Replacement Meter Reading Re-Check Leak Repair Customer Assistance Other					
Equipment Used Unit 1 Unit 5 CAT 8a Unit 2 Unit 6 Unit 8 Unit 7 Air Con Unit 4 Unit 8 Other_	ickhos Apressor	DT DT DA DC	<u>pieted BY</u>	Leak Repair Inf Fallure Type Service Duration I day GPM ID	<u><u> </u></u>
Paris Used 1x 3/4" cts wrap			Total	- 14,400	
Time Arrived at Location: Time Departed Location: Date Work Completed: Vehicle Mileage:		Work Adar Cl Just Adar Cl Just Collar	orfolieted by rpsor, John hav	aston April	

Date: 6-12-21 Time:	,				
Customer Name / Location: <u><u></u></u>	Burkhart,	Hury 1	1		
Account Number:	Locat	ion Numbe			
Physical Address		Route No	ımber		
Description of Work Needed					
Meter Relocation Sp	eciai Instrucți	ons: Co	ork stop	came out	
	of main		normality of the second s		
Meter Lid Replacement					
Meter Reading Re-Check					
Leak Repair					
Customer Assistance			Or d'Herender However, A	******	
Other					<u></u>
Equipment Used Unit 1 Unit 2 Unit 3 Unit 4 Unit 7 Air Comp Unit 4 Unit 8 Other Parts Used		Morit Co JA DT R H	mpleted BY	Lesk Repair Info Pallure Type <u>Mein</u> Duration <u>4 hours</u> GRM <u>100</u> Total - 24,000	
6' saddle					
1x cork stop 3 foot cts line					
Time Arrived at Location: Time Departed Location:	<u>}</u>	Nor dei	Corrected b	IN M	1
Date Work Completed: Vehicle Milezge:		n dla	han .	hoother Jpr	un -
	0		/		

MA/ ARA	Order	
1999日間		

Date: 6-12-21 Time:	
Customer Name / Location:	Branch
	Location Number
Physical Address	
Description of Work Needed	Route Number
Meter Relocation Special Ir	nstructions: <u>repaired</u> 4 inch main
Meter Lid Replacement	ng the creek
Meter Reading Re-Chack	
Leak Repair	
Customer Assistance	
Other	
Equipment Used Unit 1 Unit 5 CAT Backhos Unit 2 Unit 5 Air Compressor Unit 4 Unit 8 Other	Monit Completed BY Leak Repair Info DI IN Fallure Type JA Main DJ Duration JA GPINI
Parts Used	HH GPM 100 Total - 36,000
35 foot 8" C900 line 30 foot 4" pre	/
6 X Hymax	
Time Arrived at Location: Time Departed Location: Date Work Completed: Vehicle Miller co.	Work Ader Completed by: Work Alter flor, Johnston Myser
Vehicle Milesge:	Jamon Jordan , Justi- Collokan

Work Order	
Date: 62-21 Time: _	
Customer Name / Location: 6115	Branch, 1st house
Account Number:	Location Number
Physical Address	Route Number
Description of Work Needed	
Meter Relocation Spec	ecial Instructions: Meter bottom busted
Meter Lid Replacement	
Meter Reading Re-Chack	
Leak Repair	
Customer Assistance	
Eculomant Used Unit 1. Unit 5 CAT Backhoo Unit 2. Unit 6 Unit 3 Unit 7 Air Compres Unit 4. Unit 8 Other	essor DJ DJ Duration Jays
Parts Used 1X New Meter	GPM <u>35</u> 108,000 gallons
fime Arrived at Location:	
Time Departed Location: Date Work Completed: /ehicle Mileage:	Work Ofder Completed by:

Date: <u>5-27-21</u> T	ime:			
Customer Name / Location:	Overlook	RJ		
Account Number:			****	and and the constrained and an an adjust the summaries of particular and
Physical Address		Route Mur	nhau	
Description of Work Needed		HARE HUI	nwei	
Meter Relocation	Special Instruction	ons: /"	Struit	line, section
Mieter Box Replacement	replaces			
Meter Lid Replacement	I			
Meter Reading Re-Check	1			
Leak Rapair				
Customer Assistance				
Other				
Equipment Used		<u>Work Com</u>	nleto/ av	
	ackhos	DT		<u>Leak Repair Info</u> Fallure Type
	mpressor	LP		Service
				Duration Wee K
Parts Used				GPM 20
8x1" straight coupling				20.1,600 gallons
d foot ets line				
Time Arrived at Location:		ork Ardier Co	ompiejed by	
Time Departed Location: Date Work Completed:	and we can also required	M	1	2
Vehicle Mileage:	7	Vugin	Manpso	<u>``</u>

Work Order Date: <u>5-26-21</u> Time: _	
Description of Work Needed	Location Number Route Number
	iei Instructions: <u>3/4" service line</u> 24 wrapped
Equipment Used Unit 1 Unit 5 CAT Backhow Unit 2 Unit 5 CAT Backhow Unit 9 Unit 7 Air Compres Unit 4 Unit 8 Other Parts Used	JA Service
Time Arrived at Location: Time Departed Location: Date Work Completed: Vehicle Mileage:	Work Preier Completenterie

Work Order		
Date: 2-7-21	Time: 12:00 pm	
Customer Name / Location: Account Number: Physical Address Description of Work Needed Meter Ralocation	Bottom Russi E	
Equipment Used Unit 1 Unit 5 CAT Bas Unit 2 Unit 5 CAT Bas Unit 2 Unit 7 Air Com Unit 4 Unit 8 Other Parts Used <u>IX</u> <u>New setter</u> <u>IX</u>		Leak Repair into Faliture Type Setter Duration 12 hours GPM 60 Total-43200
Ix Meker Box Ix 5-1000 Ix 5-1000 Ix metur Time Arrived at Location: 12:00 among the Departed Location: 2:00 among the Departed Location: 12:00	Worlder Converted of	Total-43,200 gallons
Date Work Completed: 2-7-21 Vehicle Willesge:	Instia Manufrance	mather Almer

Work Order		
Date: 2-9-21	Time: 9:00 am	
Customer Name / Location:	Route 11	
Account Number:		
Physical Address	Location Number	
Description of Work Needed	Route Number	
Meter Relocation Weter Box Replacement Weter Lid Replacement	Special Instructions: <u>repaired</u> <u>Service line with stra</u>	
Meter Reading Re-Check		
Leak Repair		
Customer Assistance		
L Other		
	ckings JA DT	Lesix Repair Info Paliture Type Service Duration <u>I week</u>
Parts Used 2x 3/4" straight coup 1x 3/4" cts wrap	ling s	GPM 30 Total - 302,400 gallon

Time Arrived at Location: 9:00 am Worl: Order Completed by: Time Departed Location: ____11:30 am Date Work Completed: 2-8-21 Vehicle Wilesge: _____ Dray

Logan Variason, Vamon To

Work Order			
Date: 2-8-21			
Customer Name / Location: Account Number: Physical Address Description of Work Needed			
Description of Work Needed Meter Relocation Vieter Box Replacament Meter Lid Replacement			3/4" galvanized
Meter Reading Re-Chack Leak Repair Customer Assistance			
Equipment Used Unit 1 Unit 5 CAT Be Unit 2 Unit 6	ciónse JA DT Ipressor 40 DJ	<u>Completed av</u>	Leak Repair Info Pellure Type Service Duration
Parts Used 1 X galvanized shuf off 5 foot 3/4" cts line	<u> </u>		GPM 5 Total-BOD gallons
Time Arrived at Location: Time Departed Location: Date Work Completed: Vehicle Mileage:	Wistin /	tompson Jos vidson, Jamo	Jon Abrer Jordan

Work	Order

Date: 5-7-01	Time:	
Customer Name / Location:	In front of FCI	
Account Number:	Location Number	
Physical Address	Route Number	and the second second second second second second
Description of Work Needed	Route Number	
Meter Relocation Meter Box Replacement	Special Instructions; (epaired 3/4"	galvanized
Meter Lid Replacement	service line	
Weter Reading Re-Chack Leak Repair Customer Assistance		
Other Eculoment Used		
Unit 1. Unit 5 CAT 8 Unit 2. Unit 5 Unit 5 Unit 3. Unit 7 Air Co	npressor LD Du	<u>ak Repair Info</u> liura Type ser Vice ration 2 months
Parts Used /X galvenized wrop		15 1-1,296,000
Time Arrived at Location: Time Departed Location: Date Work Completed: Vehicle Willezge:	Worl: Zitiar Completed ave	

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A A A	
WW ChiPle	Order
- W W W W W W W W W W W W W W W W W W W	

Date: 5-7-21	Time:	
Customer Name / Location: Account Number:	In front of FCI Location Number	
Physical Address		
Description of Work Needed Meter Relocation Meter Box Replacament Meter Lid Replacement Meter Seading Re-Check Leak Repair Customer Assistance	Route Number	(ap)
Air Color Unit 2 Unit 5 Unit 2 Unit 5 Unit 2 Unit 5 Unit 2 Unit 7 Unit 3 Unit 7 Unit 4 Unit 8 Other Parts Used X G''	30 mins GPM 60 Total-1800	3
3 foot piece cts line 1x 3/4" galvaniaed to cts		
Time Arrived at Location: Time Departed Location: Date Work Completed: Vehicle Mileage:	Work Girler Completed pyp	

Work Order		
Date: 5-11-21 Ti	ime:	
Customer Name / Location:	Tacksons/ Price Hollow	
Account Number:	Location Number	an the second
Physical Address	Route Number	
Description of Work Needed		
Meter Relocation	Special Instructions: repaired 6 inc	h main
Weter Lid Replacement		
Meter Reading Re-Chack		and the second se
Leaic Rapair		nghananga ang ang ang ang ang ang ang ang a
Customer Assistance		ya mana a sakata na kata na na kata ka mana kata na mana kata na mana kata na kata na kata na kata na kata na k
Other		nin i ann an
Equilibrit ant User Unit 1 Unit 5 CAT 82 Unit 2 Unit 5 Unit 9 Unit 7 Air Com Unit 4 Unit 8 Other_	npressor 10 Durat	hours (120 mins)
Paris Used 2x Ginch Hymax 1 piece 6 Foot 6" pipe	13,0	<u> 100 </u>
Time Arrivec at Location:	Work And Sandhing and	

Time Departed Location: _____ Date Work Completed: _____

Vehicle Mileage: _____

Worth officer Congristed over

Work Order			
Dation 4-15-21	1e:		
Customer Name / Location:S Account Number: Physical Address	l ocetion Mu	mber	
	Rout	e Number	
Meter Soloom	peciai instructions:		
Meter Lid Replacement – Meter Reading Re-Check – Leak Repair			
Customer Assistance			
Eculoment Used Unit 1 Unit 5 CAT Back Unit 2 Unit 5 CAT Back Unit 3 Unit 7 Air Comp Unit 4 Unit 8 Other	essor		Leak Repair Into Pallure Type Service Duration 6 hours
Paris Used 2x 1" cts straight cou 6 feat 1" cts line	pling		39M <u>60</u> Tala) - 18,000
Time Arrived at Location: Time Departed Location: Date Work Completed: Vehicle Mileage:	Worl: Oxfe	Completed over	The April

Work Order _{Date:} <u>4-15-21</u>	Time:
Description of Work Needed Meter Relocation Meter Box Replacement	Sester Hollow Location Number Route Number Special Instructions: repaired 3/4" Service
Meter Lid Replacement Meter Reading Re-Check Leak Repair Customer Assistance Other Customer Used Unit 2 Unit 2 Unit 3 Unit 3 Unit 4 Unit 8 Other	Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apressor Apress
Parts Used <u>IX 3/4" Cts wrap</u> Time Arrived at Location: Time Departed Location:	GPM 45 Total - 1941, 400
Date Work Completed: Vehicle Mileage:	amon Jordan, Logan Javillson

Work Order	
Date: 4-30-21 Time:	
Description of Work Needed	Beside Dirt Road Location Number Route Number Route Number 21 Instructions; repaired 1" cts
Equivment Used Unit 1 Unit 5 Unit 2 Unit 5 Unit 2 Unit 6 Unit 3 Unit 7 Unit 4 Unit 8 Other Parts Used	Dr D
Time Arrived at Location: Time Departed Location: Date Work Completed: Vehicle Millesge:	Worth Optier Completed are 1055 - Mongrow Jonethon Albrer, Legen Davidson Danon Jordan

Wor	6	ଜ୍ଞାର	ro
			ļ

Date: 4-30-21	Time:
Customer Name / Location:	Pine Hill Rd
Account Number:	Location Number
PUVED DI Apidiment	Route Number
Description of Work Needed	
Meter Relocation	Special Instructions: repaired /" cts
Meter Box Replacement	
Vieter Lid Replacement	
Meter Reading Re-Check	
Leak Repair	
Customer Assistance	
Cthar	
Unit 4 Unit 8 Othe	ompressor TOT <u>Service</u> DU Duration TOT <u>Inouth</u> GPM <u>15</u>
Parts Used	Jataf- 648,000
Ix straight coupling Ix wrap	
2x 3/4" nipples	
ax pigtails	
lime Arrived at Location:	
Ime Departed Location: Nate Work Completed:	- Il. A a / V
/ehicle Milesge:	1945 . 1 Monghor Monen
	Jogen farisson, famon forder

Work	Sm.P
	Urder:

Customer Name / Location: Account Number: Physical Address	Jacks B	.ocation A	umber	ressing
Description of Work Needed Meter Relocation Meter Box Replacement Meter Lid Replacement Nieter Reading Re-Check Leak Repair	Special Instr <u>line</u>		PART 18.392	9 <u>3/4" servi</u>
Customer Assistance Cthar <u>Eculument Cast</u> Unit 2 Unit 2 Unit 3 Unit 3 Unit 4 Unit 3 Unit 3 Unit 4 Unit 3 Unit 3 Unit 4	Tipressor			Lesit Repair into Fallons Type Service Duration <u>A4 hours</u> GPWi <u>40</u>
1X 3/4" cts wrap 1X 3/4" straight coupling a Arrived at Location: 1:30 p e Departed Location: 3:00 p e Work Completed: 3-1-21	im .	Mary Jee		Total-57,6

Work Order Date: 3-2-21 Time: 3:00 pm
Customer Name / Location: <u>Thomas Branch</u> Account Number: <u>Location Number</u>
Description of Work Needed Route Number Meter Relocation Special Instructions: repaired both 1" lines Neter Box Replacement Feeding thomas Brank Neter Lid Replacement Special Instructions: Command Brank
Weter Reading Re-Check Leak Repair Customer Assistance
Air Compressor Differ Lesit Recaininto Unite 2 Unite 5 CAT Bedithos Differ Unite 3 Unite 7 Air Compressor Differ Unite 4 Unite 8 Other Differ
Parts Used <u>4x 1" cts wraps</u> Total - 108,000 galler
Time Departed Location: Time Departed Location: Date Work Completed: Vehicle Millesge: Vehicle Millesge: Ogan Varidson , Vamon Jordin

Work Order		
Date: 3-2-21	Time: 19:30 am	
Customer Name / Location:	Brushy Branch	
Account Number: Physical Address	Location Number	fan y san ei balannyn anna fy staan anna an an ar
Description of Work Needed	Route Number	
Meter Relocation	Special Instructions: rerouted a	creek wassi
Meter Lid Replacement	with Leaking Service	line.
Meter Reading Re-Chack		
Leak Repair		
Customer Assistance		
<u>Equipment Used</u>		
Unit 1. Unit 5 CAT Br Unit 2. Unit 5 Unit 2. Unit 5 Unit 7 Unit 4. Unit 8 Unit 8 Unit 8 Other_	öpressor	Estimation Service Duration
Parts Used		GPN 60
1x 3/4" straight coupling	" cts line	Total - 172,800 gallons
Time Arrived at Location: Time Departed Location: Date Work Completed: Vehicle Willesge:	Juter Thompson	

Work Order Date: <u>3-6-21</u>	Time:	
Physical Address	Gabsais Fork Location Number Route Number Special Instructions: Re-laid DOUNJ S/IP in Poado	9" M.
Paris User	Mini Excavor	Lessi Receirinto Peliure Type Duretion GRM
Time Arrived at Location: Time Departed Location: Date Work Completed: <u>3-6-2(</u> Vehicle Willesge:	Work Order Completed	

$\int \int \partial \eta = \eta$	
WWIG的跨越在	Order

Date: <u>3-23-21</u>	Time: <u>2:15 pm</u>
Customer Name / Location:	Bales Creek
Account Number: Physical Address	Location Number
Description of Work Needed	Route Number
Meter Relocation	Special Instructions: 3/4 inch service line leaking
Meter Lid Replacement	right off the cork stop
Mater Reading Re-Check	
Customer Assistance	
Eduloment Used	
	Tiprasson
arts Used <u>2X stiffners</u> <u>2 foot piece ³/4 inch ets 1,</u> 1X ³ /4 straight coupling	SPIN IND
1× 3/4 Straight coupling	ne
ne Arrived at Location: 1:00 pm	

Th Jon the Aprer Time Departed Location: 8:15 pm Thore for Work Date Work Completed: 3-23-21 Vehicle Mileage: ____



Date: 1-27-21 Time:	
Customer Name / Location:	N Hwy 421
Account Number:	Location Number
Physical Address	
Description of Work Needed	Route Number
Meter Relocation Special Inst	tructions:
Meter Box Replacament	
Meter Lid Replacement	
Meter Reading Re-Check	
Leak Repair	
Customer Assistance	
Other	
Equipment Used	Marin Commission 200
Unit 1 Unit 5 CAT Backhoe Unit 2 Unit 6 Unit 3 Unit 7 Air Compressor Unit 4 Unit 8 Other	DT Failure Type Service DUration DJ DJ DJ DJ DJ DJ DJ DJ DJ DJ
Paris Used 1 × galvanized to cts coupling	GPM 3' Total - 8,640
a foot cts line Meter Box, Meter Lid setter	
Time Arrived at Location: 11:00 am Time Departed Location: 3:00 am	Wort: Orciel Completed by:

Time Departed Location:	3:00 pm
Date Work Completed:	1-27-21
Vehicle Milleage:	for the second second

Justin Thompson, Jonathon Hammer



Date: <u>/-29-21</u>	ïme: 8	00 am		
Customer Name / Location:	Bill	Narren		
Account Number:	and the second s	Location No.		and Real Proc. and a first strange and a first state of the Real Annual Annual State of the Real Annual Annual A
Physical Address		Doux	mber	
Description of Work Needed			e Numper	
Meter Relocation	Special Inst	Tuctions	Ceplaced	leaking setler
Meter Box Replacament			100.4200	Teaking Setter
Meter Lid Replacement				
Meter Reading Re-Check	1			
Leak Repair				
Customer Assistance				
Equipment Used Unit 1 Unit 5 CAT Ba Unit 2 Unit 6 Unit 7 Air Con Unit 4 Unit 8 Other	Ckhos 1pressor	5A 01 20 05	Completed BY	Leak Repair Info Failure Type
Paris Used <u>1 X SNEW setter</u> <u>DDM 3 foot/"ets line</u> <u>1 X "ets wrap</u>				<u> month</u> GPM <u>10</u> Total-432,000 gallons
Time Arrived at Location: 9:00 aw Time Departed Location: 12:00 p	1 //	Work Ord	. Completer b	

Date Work Completed: ______

fletin Mangson, Jonathan Almar



Date: <u>1-26-21</u> Tim	e: 7:30 am
Customer Name / Location:	Fox Hollow Main / 6 inch
Account Number:	Location Number
Physical Addinana	Route Number
Description of Work Needed	
Meter Relocation	Special Instructions: repaired 6 inch main
Weter Box Replacement	with 2 foot band clamp
Meter Lid Replacement	
Meter Reading Re-Check	
Leak Rapair	
Customer Assistance	
U Other	
	ckhos JA Fallurs Type DT Duration DJ DJ DJ Duration GPINIGO
Parts Used <u>a foot band clamp</u>	Total - 43,200
Time Arrived at Location: <u>8:00 c</u> Time Departed Location: <u>8:30</u> Date Work Completed: <u>1-26-2</u> Vehicle Mileage:	pm 1/1 A 1



Date: 1-26-21 Time: 4:00 pm
Customer Name / Location: Terri Sams
Account Number: 165521 Location Number
Physical Address 12855 N Hwy 121 Route Number
Description of Work Needed
Meter Relocation Special Instructions:
$\square Meter Relocation \qquad Special Instructions: repaired a split in \square Meter Box Replacement \qquad \underline{3/4'' service line}$
Meter Lid Replacement
Meter Reading Re-Check
Leak Repair
Customer Assistance
Other
Equipment Used Work Completed SY Leak Repair Info Unit 1 Unit 5 CAT Backhos The second
Parts Used 2 X 3/4" straight coupling 3 foot 3/4" cts line
Time Arrived at Location: 4:00 pm Work: Out Completed by: Time Departed Location: 5:00 pm Date Work Completed: 1-26-21 Vehicle Mileage:

Vehicle Mileage: _____

Exhibit 6a

Exhibit 6(e)

NORTH MANCHESTER WATER ASSOCIATION

7361 North Highway 421 Manchester, KY 40962 Phone: (606) 598-5403

EMERGENCY RESPONSE INFORMATION REVISED 11/11/2021

POSITION	NAME	PHONE NUMBER
OFFICE		(606) 598-5403
FIELD	Bill Gray	(606) 681-6153
OFFICE	Rose Lewis	(606) 594-8671

LOCAL EMERGENCY NUMBERS			
AMBULANCE		911	
FIRE DEPT		911	
POLICE DEPT		911	
RECUE SQUARD		911	
STATE POLICE		911	
SHERIFF		911	
MAYOR	James Garrison	(606) 598-6403	
CITY MANAGER	Mike White	(606) 813-8480	
WATER PLANT	Josh Murphy	(606) 813-7050	
EMERGENCY MANG DIR	David Watson	(606) 598-5104	
RADIO STATION	WTBK	(606) 598-7588	
TV STATION	WYMT (Hazard)	(606) 439-5757	
	WKTY (Lexington)	(859) 299-2727	

STATE GOVERNMENT EMERGENCY NUMBERS				
*EMERGENCY RESPONSE TEAM		(502) 564-3350		
24 HOUR RESPONSE		(502) 564-2380		
DIVISION OF EMERGENCY SERVICES				
24 HR RESPONSE		(502) 564-7815		
*DIVISION OF WATER		(502) 564-3410		
REGIONAL OFFICE	Beth Trent	(606) 330-2080		
BOIL WATER ADV-WEEK	REGIONAL OFFICE	(606) 330-2080		
BOIL WATER ADV-WEEKENDS	(LOG Incident Number)	(800) 928-2380		
CERTIFIED LABORATORY	Applachian States	(606) 437-5616		
FEDERAL GOVERNMENT NUMBERS				
*EPA-HAZARDOUS EMERGENCY				
	BRANCH	(404) 881-3931		
	24 HR RESPONSE	(404) 881-4062		
*NATIONAL RESPNSE CTR.		(800) 424-8802		
*COAST GUARD		(502) 582-5194		

*Agencies concerned with chemical spills.

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC INVESTIGATION INTO EXCESSIVE WATER LOSS BY KENTUCKY'S JURISDICTIONAL WATER UTILITIES

)) CASE NO.) 2019-00041

CERTIFICATION OF RESPONSES TO COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION

This is to certify that I have supervised the preparation of North Manchester Water Association's ("NMWA"),responses to the Commission Staff's Second Request for Information and that the responses are true and accurate to the best of my knowledge, information, and belief after reasonable inquiry.

Date: 1/ 1/2 / 2/

Rose Leuris

Rose Lewis, NMWA Manager DR