

**RESULTS OF ANALYSIS FOR 2020 FOR CONSECUTIVE SYSTEMS OF COOKEVILLE
THIS IS IN THE COMPLIANCE PERIOD OF 2020-2022**

Sample due annual

Regulated VOC's	RESULTS	detection limit	MCL	DATE	ESC Sample #
				1/15/2020	LI1179671
Benzene	ND	0.0005	0.0050		
Carbon tetrachloride	ND	0.0005	0.0050		
1,4-Dichlorobenzene (para)	ND	0.0005	0.0750		
1,2-Dichloroethane (ortho)	ND	0.0005	0.0050		
1,1-Dichloroethene (Dichloroethylene)	ND	0.0005	0.0070		
1,1,1-Trichloroethane	ND	0.0005	0.2000		
Trichloroethene(Trichloroethylene)	ND	0.0005	0.0050		
Vinyl chloride	ND	0.0005	0.0020		
1,2,4-Trichlorobenzene	ND	0.0005	0.0700		
cis-1,2-Dichloroethene (Dichloroethylene)	ND	0.0005	0.0700		
Xylenes, Total	ND	0.0005	10.0000		
Methylene chloride (Dichloromethane)	ND	0.0005	0.0050		
1,2-Dichlorobenzene	ND	0.0005	0.6000		
trans-1,2-Dichloroethene (Dichloroethylene)	ND	0.0005	0.1000		
1,2-Dichloropropane	ND	0.0005	0.0050		
1,1,2-Trichloroethane	ND	0.0005	0.0050		
Tetrachloroethene (Tetrachloroethylene)	ND	0.0005	0.0050		
Chlorobenzene	ND	0.0005	0.1000		
Toluene	ND	0.0005	1.0000		
Ethylbenzene	ND	0.0005	0.7000		
Styrene	ND	0.0005	0.1000		

meta is the 1-3 position, ortho is the 1-2 position, para is the 1-4 position

cis is a double carbon bond attached to two other groups.

trans is a atom positioned opposite.

Unregulated VOC's	Result	detection limit	MCL	DATE	ESC Sample #
				1/15/2020	LI1179671
Bromobenzene	ND	0.0005			
Bromodichloromethane	0.00194	0.0005	***		
Bromoform	ND	0.0005			
Bromomethane	ND	0.0005			
Chlorodibromomethane (Dibromochloromethane)	ND	0.0005			
Chloroethane	ND	0.0005			
Chloroform	0.00676	0.0005	***		
Chloromethane	ND	0.0005			
1,2-Chlorotoluene (ortho)	ND	0.0005			
1,4-Chlorotoluene (para)	ND	0.0005			
Dibromomethane (Methyl Bromide)	ND	0.0005			
1,3-Dichlorobenzene (meta)	ND	0.0005			
1,1-Dichloroethane	ND	0.0005			
1,3-Dichloropropane	ND	0.0005			
2,2-Dichloropropane	ND	0.0005			
1,1-Dichloropropene	ND	0.0005			
1,3-Dichloropropene	ND	0.0005			
1,1,1,2-Tetrachloroethane	ND	0.0005			
1,1,1,2-Tetrachloroethane	ND	0.0005			
1,2,3-Trichloropropane	ND	0.0005			

*** Bromodichloromethane is one of the four compounds that is the sum for THM's.

*** Chloroform is one of the four compounds that is the sum for THM's.

These compounds are formed when chlorine is used in the presence of natural organic matter

Cookeville treatment primarily focuses on organic removal and removes above 60% of organics annually.

The sum of these four compounds must be 0.080 ppb to be in violation of the MCL.

EPA states in the federal register, one must drink 2 liters of water per day for 70 years to have a 1 in 10,000 chance of cancer.

VOC's ARE ANNUAL SAMPLING

SYNTHETIC ORGANIC COMPOUNDS							
	Results	det. limit	MCL in mg/l	Date	ESC SAMPLE #		
SOC's-Atrazine-raw							
SOC's-Atrazine-finished	ND	0.0001	0.003	4/30/2020	L1215666		
SOC's-2, 4 D, added 2014	ND	0.0001	0.07	4/30/2020	3.6E+09		
SOC's-Picloram, added 2014	ND	0.0001	0.5	4/30/2020	3.6E+09		
MUST BE DONE IN THE COMPLIANCE PERIOD OF 2021-2023.				Sample every 3 years.			
Next due 2020 between April 1st and June 30.							
SOC's ANALYSIS FOR THE ABOVE IS ONCE DURING EACH 3 YEAR COMPLIANCE PERIOD BETWEEN APRIL AND JULY OF EACH 3-YEAR COMPLIANCE PERIOD AFTER A SIGNIFAICANT RAIN EVENT OF 1"							
SOC's for raw for special compliance rule		Det Limit	MCL in mg/l				
Nitrate	BDL	0.1	10	5/9/2012	L574139-01-02		
Alachlor	BDL	0.0002	0.002	NOTE: THIS WAS SPECIAL			
Atrazine	BDL	0.0001	0.003	SAMPLING FOR NITRATES			
Simazine	BDL	0.00006	0.004	NOT THE ANNUAL SAMPLE.			
Metolachlor	BDL	0.0002					
Aldicarb	BDL	0.0005					
Carbofuran	BDL	0.0009	0.04				
2,4-D	BDL	0.0001					
Glyphosate	BDL	0.006	0.7				
Special sampling for the above completed 5/9/12							
ALL OTHER SOC's IN 0400-45-01 ARE WAIVERED BECAUSE OF LACK OF USE I N THE AREA.							
INORGANIC CHEMICALS							
	Results	Detection limit	MCL	Date	ESC SAMPLE #		
Abestos	BDL	0.17	7 Million Fibers per Liter	1/23/2012	L556979		
ABESTOS MUST BE SAMPLED ONCE IN THE 9 YEAR COMPLIANCE CYCLE OF 2011-2019							
ABESTOS MUST BE SAMPLED ONCE IN THE 1st 3 YEAR COMPLIANCE PERIOD OF EACH 9 YEAR CYCLE							
SAMPLE DUE AGAIN IN 2021							
	Results		MCL	Date	ESC SAMPLE #		
Nitrate	0.282		10	1/1/2020	L1175389		
Nitrate for special sampling							
NITRATE IS ANNUAL SAMPLING MUST BE IN FIRST QUARTER OF EACH YEAR							
	Results		MCL	Date	ESC SAMPLE #		
Sodium	27.4		none	1/1/2020	L1175400		
Rule 0400-45-01-.24(3) Notify local and State health officials/3 months							
SODIUM IS ANNUAL SAMPLING							
	Results on site	Results at independent lab	MCL		ESC SAMPLE #		
FLUORIDE							
Fluoride	0.088	ND	2	1/1/2020	L1175403		
Fluoride	0.0627	ND	2	4/2/2020	L1205737		
Fluoride	0.083	ND	2	7/1/2020	L1235959		
Fluoride	0.108	ND	2	10/1/2020	L1268684		
FLUORIDE IS QUARTERLY SAMPLING							

LT2 ROUND 1						
MARCH 2010 SAMPLES COMPLETED THE LT2 ROUND 1 COMPLIANCE RESULTS WERE <0.075 OOCYSTS FOR ROUND 1 OF LT2.						
With the results of <0.075 we require any additional treatment (bin 1), rule 1200-5-1-.39(11)(b)(2).						
LT2 ROUND 2 START 10/15/16.						
	Results E-coli	Results-crypto	Limit	Date	ESC SAMPLE #	
Cryptosporidium FS		0		10/5/2016	L863887	
E.Coli	<1					
Cryptosporidium FS		0		11/3/2016	L870323-01	
E.Coli	1					
SPIKE SAMPLE	SPIKE	64.40%	13-111%	11/3/2016	L870323-02	
Cryptosporidium FS		0		12/7/2016	L876889	
E.Coli	1					
Cryptosporidium FS		0		1/4/2017	L881856	
E.Coli	12					
Cryptosporidium FS		0		2/2/2017	L887397	
E.Coli	9					
Cryptosporidium FS		0		3/2/2017	L893317	
E.Coli	2					
Cryptosporidium FS		0		4/5/2017	L900565	
E.Coli	5.2					
Cryptosporidium FS		0		5/3/2017	L906560	
E.Coli	4.1					
Cryptosporidium FS		0		6/7/2017	L914227	
E.Coli	4.1					
Cryptosporidium FS		0		7/5/2017	L920282	
E.Coli	5.2					
Cryptosporidium FS		0		8/16/2017	L929797	
E.Coli	<1					
Cryptosporidium FS		0		9/6/2017	L934117	
E.Coli	<1					
Cryptosporidium FS		0		10/4/2017	L941145	
E.Coli	1					
Cryptosporidium FS		0		11/2/2017	L948007	
E.Coli	2					
Cryptosporidium FS		0		12/6/2017	L955403	
E.Coli	1					
Cryptosporidium FS		0		1/3/2018	L960841	
E.Coli	12.1					
Cryptosporidium FS		0		2/7/2018	L968331	
E.Coli	1					
Cryptosporidium FS		0		3/7/2018	L975397	
E.Coli	14.8					
Cryptosporidium FS		0		4/4/2018	L982877	
E.Coli	6.3					
Cryptosporidium FS		0		5/2/2018	L990311	
E.Coli	1					
Cryptosporidium FS		0		6/6/2018	L999411	
E.Coli	1					
Cryptosporidium spike		45.9% recovery	13-111%	6/6/2018	L999411	
spike samples are every	20th sample, due June 2018					
Cryptosporidium FS		0		7/5/2018	L1006826	
E.Coli	12.1					
Cryptosporidium FS		0		8/2/2018	L1014108	
E.Coli	2					
Cryptosporidium FS		0		9/5/2018	L1022986	
E.Coli	3					
LT2 ROUND 2 FINISHED 9/5/18. NO (0.00) CRYPTO WAS FOUND IN THE 24 SAMPLES REQUIRED.						
USEPA Bin classification remains at 1. NO FURTHER TREATMENT TECHNIQUES REQUIRED AT THIS TIME.						

	required TOC removal in %	settled alk.	removal %	raw results	temperature/ coagulant ppm's	finished water results	DATE	ESC SAMPLE #	corresponding DBP/thm
Jan	25	31	66.50%	1.63	13/46.9	0.55	1/1/2020	L1175383	0.00784
Jan	25	28	69.07%	1.83	13/44.2	0.57	1/7/2020	L1179699	0.00724
Jan	25	21	68.36%	1.83	13/42.8	0.58	1/9/2020	L1179699	0.0124
Jan	25	27	70.76%	1.84	13/42.3	0.54	1/14/2020	L1179699	0.0147
Feb	35	20	71.08%	1.76	12/30.4	0.51	2/4/2020	L1186272	0.0147
Feb	35	24	67.71%	1.88	13/53.2	0.61	2/10/2020	L1189197	0.0327
Feb	35	24	69.12%	1.81	13/53.4	0.56	2/12/2020	L1189197	0.0263
Feb	35	21	72.04%	1.91	13/49.5	0.53	2/25/2020	L1193838	0.0281
Feb	35	22	69.54%	1.96	13/44.6	0.60	2/26/2020	L1193838	0.0189
March	35	23	71.68%	1.73	13/42.3	0.49	3/3/2020	L1195653	0.0132
April	35	20	66.44%	1.46	15/32.1	0.49	4/2/2020	L1205750	0.018
May	35	19	71.35%	1.71	17/36.5	0.49	5/3/2020	L1215621	0.0208
May	25	18	70.30%	1.65	18/37.2	0.49	5/29/2020	L122811	
June	25	28	69.94%	1.63	18/38.9	0.49	6/1/2020	L1224814	
July	25	25	72.93%	1.81	20/40.5	0.49	7/1/2020	L1235974	0.0213
July	25	24	68.99%	1.58	21/40.7	0.49	7/8/2020	L1239865	
July	25	25	79.04%	2.39	22/41.5	0.50	7/14/2020	L1239865	
July	25	30	68.86%	1.75	25/41.4	0.55	7/26/2020	L1246852	0.0259
August	25	34	67.02%	1.81	25/39.4	0.60	8/3/2020	L1246849	0.0312
August	25	34	71.35%	1.71	25/38.4	0.49	8/11/2020	L1251685	0.0163
August	25	33	63.52%	1.62	27/38.4	0.59	8/12/2020	L1251685	0.0255
August	25	32	66.39%	1.69	27/38.6	0.57	8/13/2020	L1251685	0.027
August	25	34	63.92%	1.66	26/37.7	0.60	8/14/2020	L1251685	0.025
August	25	40	67.39%	1.76	27/39.8	0.57	8/19/2020	L1253853	0.0124
August	25	38	68.99%	1.58	28/41.7	0.49	8/21/2020	L1253853	0.0123
August	25	37	67.02%	1.68	27/36.2	0.55	8/23/2020	L1253853	0.0122
August	25	37	58.14%	1.67	29/40.2	0.70	8/31/2020	L1257984	0.017
Sept	25	31	71.33%	2.25	29/36.8	0.65	9/1/2020	L1257984	0.0189
October	25	35	67.65%	1.83	25/45	0.59	10/1/2020	L1268682	0.0123
October	25	29	64.86%	1.85	22/42.9	0.65	10/19/2020	L1278264	0.0117
October	25	30	64.67%	1.82	21/43.5	0.64	10/26/2020	L1278263	0.0126
October	25	30	63.81%	1.76	22/43.1	0.64	10/28/2020	L1281621	0.0147
November	25	36	56.10%	1.59	20/45.7	0.698	11/3/2020	L1281623	0.0138
November	25	31	66.89%	1.48	20/47.2	0.49	11/11/2020	L1285611	0.0176
December	25	31	67.33%	1.50	16/46.6	0.49	12/1/2020	L1291546	0.0183
average	27.29	28.63	68.00%	1.75		0.56			

Raw TOC average lowest in years do to raising in lake elevation and pulling water below thermocline.

TOC's sampled at least monthly and/or after any treatment technique change

Finished TOC use 0.49 For the sample results that are ND at detection level of 0.50

goal for TOC removal is >60% with an alkalinity reduction of 64% .

Alkalinity reduction must be watched close when settled alk is 15 or<.

Primary Inorganics must be sampled once during the compliance period of 2014-2016.							
Due again in second quarter 2024 compliance period. By letter dated 12/11/14 for a nine year date.							
Monitoring update by TDEC (2/17/17) confirms next sample quarter.							
	Inorganics		detection limit ma/l	MCL		ESC SAMPLE #	
Arsenic		BDL	0.001	0.01	4/1/2015	L756957	
Barium		0.016	0.005	2			
Cadium		BDL	0.001	0.005			
Chromium		BDL	0.01	0.1			
Cyanide		BDL	0.005	0.2			
Fluoride		BDL	0.1	4			
Mercury		BDL	0.0002	0.002			
Nickel		BDL	0.02	0.1			
Selenium		BDL	0.001	0.05			
Antimony Total		BDL	0.001	0.006			
Beryllium Total		BDL	0.001	0.004			
Thallium Total		BDL	0.001	0.002			
Secondary Inorganics must be sampled once during the compliance period of 2014-2016.							
Due again in second quarter 2024 compliance period. By letter dated 12/11/14 for a nine year date.							
Monitoring update by TDEC (2/17/17) confirms next sample quarter.							
	Secondary inorganics		detection limit ma/l	MCL		ESC SAMPLE #	
Aluminum		BDL	0.1	0.2	4/1/2015	L756957	
Chloride		37.00	1	250			
Copper		BDL	0.02	1			
Iron		BDL	0.1	0.3			
Manganese		BDL	0.01	0.05			
Silver		BDL	0.01	0.1			
Sulfate		6.4	5	250			
MBAS		0.044	0.025	0.5		4/16/2015	L759634
Zinc		BDL	0.05	5			
Color		1	1	15			
Odor		1	1	3			
pH		8.06	6.5--8.5 varies with corrosio n control** **	MCL is determined by the corrosive factors in the water, not to exceed 9.0		6/2/2015	L768733
Dissolved Solids		140	10	500			
Sodium		18	1	none		**** pH varies for corrosion control to satisfy lead and copper leaching	
Chemical Analysis	Use		Minimum Detection Level (NG/L PPT)	Concentration (ng/L.ppt)			
DEET	INSECT REPELLANT		10	BDL			
Diethyl phthalate	PLASTICIZER		10	16.2			
4-tert-Octylphenol	nonionic detergent metabolite		10	BDL			
Ibuprofen	non-steroidal-anti-inflammatory		1000	BDL			
Cotinine	nicotine metabolite		50	BDL			
Atrazine	herbicide		10	BDL			
Caffeine	stimulant		10	BDL			
4-nonylphenol	nonionic detergent metabolite		10	BDL			
Fluoxetine	antidepressant (Prozac)		50	BDL			
Fluoranthene	PAH		4	BDL			
Triclosan	antiseptic		250	BDL			
Bisphenol A	plasticizer		100	BDL			
Caramazepine	anticonvulsant		100	BDL			
Sertraline	antidepressant (Zoloft)		10	BDL			
Coprostanol	fecal steriod		75	142.8			
Estrogenic+			0.5	BDL			
Androgenic			9	BDL			
Toxicity				>62.5X			
Date of samples, 3/29/2011. Taken from raw water source.							

Unregulated Contaminant Monitoring Regulation 3				Date sampled		Date sampled	
Sample point is Plant effluent				5/14/2014	NSL project	8/12/2014	NSL project
				ug/L	218926		22494
Metal digestion-total recov.ICP-MS				YES		YES	
1,4-Dioxane				ND		ND	
Chlorate				100		ND	
Chromium				0.4		0.52	
Cobalt				ND		ND	
Hexavalent Chromium				0.38		0.6	
Molybdenum				ND		ND	
Perfluorobutanesulfonic acid (PFBS)				ND		ND	
Perfluoroheptanoic acid (PFHpA)				ND		ND	
Perfluorohexanesulfonic acid (PFHxS)				ND		ND	
Perfluorooctanoic acid (PFOA)				ND		ND	
Perfluorononanoic acid (PFNA)				ND		ND	
Perfluorooctanesulfonic acid (PFOS)				ND		ND	
Solid Phase Extraction method 522				YES		YES	
Solid Phase Extraction method 537				YES		YES	
Strontium				76		84	
VOC's							
Vanadium				ND		ND	
1,1-Dichloroethane	VOC			ND		ND	
1,2,3-Trichloropropane				ND		ND	
1,3-butadiene				ND		ND	
Bromochloromethane	THM			ND		ND	
Bromomethane				ND		ND	
Chlorodifluoromethane	FREON 22			ND		ND	
Chloromethane				ND		ND	
Sample point is MP 14 Max site				Date sampled		Date sampled	
				5/14/2014	NSL project	8/12/2014	NSL project
				ug/L	218926		22494
Metal digestion-total recov.ICP-MS				YES		YES	
Chlorate				110		ND	
Chromium				0.38		0.521	
Cobalt				ND		ND	
Hexavalent Chromium				0.38		0.569	
Molybdenum				ND		ND	
Strontium				75		83.406	
Vanadium				ND		ND	

Unregulated Contaminant Monitoring Regulation 3				Date	Date
Sample point is Plant effluent				11/11/2014	2/11/2015
				NSL project	NSL project
				231066	235343
Metal digestion-total recov.ICP-MS				YES	YES
1,4-Dioxane				ND	ND
Chlorate				ND	ND
Chromium				0.34	ND
Cobalt				ND	ND
Hexavalent Chromium				0.21	0.12
Molybdenum				ND	ND
Perfluorobutanesulfonic acid (PFBS)				ND	ND
Perfluoroheptanoic acid (PFHpA)				ND	ND
Perfluorohexanesulfonic acid (PFHxS)				ND	ND
Perfluorooctanoic acid (PFOA)				ND	ND
Perfluorononanoic acid (PFNA)				ND	ND
Perfluorooctanesulfonic acid (PFOS)				ND	ND
Solid Phase Extraction method 522				YES	YES
Solid Phase Extraction method 537				YES	YES
Strontium				100	84
VOC's					
Vanadium				ND	ND
1,1-Dichloroethane				ND	ND
1,2,3-Trichloropropane				ND	ND
1,3-butadiene				ND	ND
Bromochloromethane				ND	ND
Bromomethane				ND	ND
Chlorodifluoromethane				ND	ND
Chloromethane				ND	ND
Sample point is MP 14 Max site				11/11/2014	2/11/2015
				NSL project	NSL PROJECT
				231066	235343
Metal digestion-total recov.ICP-MS				YES	YES
Chlorate				ND	ND
Chromium				0.32	0.21
Cobalt				ND	ND
Hexavalent Chromium				0.25	0.14
Molybdenum				ND	ND
Strontium				110	87
Vanadium				ND	ND
Third round completed in 2015 per EPA requirements.					
COMPLETED UCMR3 2/11/2015					

Unregulated Contaminant Monitoring Regulation 4				(START AUGUST 2018)			
Sample point is Plant effluent							
		Date	NSL project	Date	NSL project	Date	NSL project
		8/1/2018	304789	11/6/2018	311486	2/5/2019	315644
							5/1/2019
							320404
2-Propen-1-ol		ND		ND		ND	ND
1 Butanol		ND		ND		ND	ND
2-Methoxyethanol		ND		ND		ND	ND
Ethoprop		ND		ND		ND	ND
alpha-Hexachlorocyclohexane		ND		ND		ND	ND
Dimethipin		ND		ND		ND	ND
Chlorpyrifos		ND		ND		ND	ND
Profenofos		ND		ND		ND	ND
Tribufos		ND		ND		ND	ND
Oxyfluorfen		ND		ND		ND	ND
Tebuconazole		ND		ND		ND	ND
o-Toluidine		ND		ND		ND	ND
Quinoline		ND		ND		ND	ND
Butylated hydroxyanisole		ND		ND		ND	ND
Total permethrin (cis & trans)		ND		ND		ND	ND
Buck Mtn tank site analysis.							
Bromochloroacetic acid (BCAA)		3.4 ug/l		2.6 ug/l		1.6 ug/l	1.8 ug/l
Bromodichloroacetic acid (BDCAA)		1.4 ug/l		1.2 ug/l		1.2 ug/l	0.96 ug/l
Chlorodibromoacetic acid (CDBAA)		0.42 ug/l		0.39 ug/l		0.59 ug/l	ND
Tribromoacetic acid (TBAA)		ND		ND		ND	ND
Monobromoacetic acid (MBAA)		0.54 ug/l		ND		ND	ND
Dibromoacetic acid (DBAA)		0.45 ug/l		ND		ND	ND
Dichloroacetic acid (DCAA)		16 ug/l		15 ug/l		20 ug/l	33 ug/l
Monochloroacetic acid (MCAA)		ND		ND		ND	2.3 ug/l
Trichloroacetic acid (TCAA)		4.8 ug/l		5.4 ug/l		13 ug/l	16 ug/l
HWY 70 EAST (SHADY LN)							
Bromochloroacetic acid (BCAA)		3.7 ug/l		2.2 ug/l		1.5 ug/l	1.8 ug/l
Bromodichloroacetic acid (BDCAA)		1.7 ug/l		1.1 ug/l		1.2 ug/l	0.97 ug/l
Chlorodibromoacetic acid (CDBAA)		0.56 ug/l		0.37 ug/l		ND	ND
Tribromoacetic acid (TBAA)		ND		ND		ND	ND
Monobromoacetic acid (MBAA)		0.60 ug/l		ND		ND	ND
Dibromoacetic acid (DBAA)		0.56 ug/l		ND		ND	ND
Dichloroacetic acid (DCAA)		15 ug/l		12 ug/l		19 ug/l	27 ug/l
Monochloroacetic acid (MCAA)		ND		ND		ND	ND
Trichloroacetic acid (TCAA)		4.6 ug/l		4.9 ug/l		12 ug/l	15 ug/l
IRONWOOD GOLF COURSE							
Bromochloroacetic acid (BCAA)		3.6 ug/l		2.2 ug/l		1.7 ug/l	1.9 ug/l
Bromodichloroacetic acid (BDCAA)		1.6 ug/l		1.2 ug/l		1.3 ug/l	0.79 ug/l
Chlorodibromoacetic acid (CDBAA)		0.53 ug/l		ND		0.32 ug/l	ND
Tribromoacetic acid (TBAA)		ND		ND		ND	ND
Monobromoacetic acid (MBAA)		0.55 ug/l		ND		ND	ND
Dibromoacetic acid (DBAA)		0.54 ug/l		ND		ND	ND
Dichloroacetic acid (DCAA)		16 ug/l		12 ug/l		21 ug/l	42 ug/l
Monochloroacetic acid (MCAA)		ND		ND		ND	3.1 ug/l
Trichloroacetic acid (TCAA)		4.4 ug/l		4.9 ug/l		13 ug/l	15 ug/l
HWY 70 WEST (THOMAS RD AREA)							
Bromochloroacetic acid (BCAA)		3.4 ug/l		2.2 ug/l		1.7 ug/l	2.0 ug/l
Bromodichloroacetic acid (BDCAA)		1.6 ug/l		1.1 ug/l		1.3 ug/l	0.83 ug/l
Chlorodibromoacetic acid (CDBAA)		0.54 ug/l		0.34 ug/l		ND	ND
Tribromoacetic acid (TBAA)		ND		ND		ND	ND
Monobromoacetic acid (MBAA)		0.62 ug/l		ND		ND	ND
Dibromoacetic acid (DBAA)		0.55 ug/l		ND		ND	ND
Dichloroacetic acid (DCAA)		14 ug/l		13 ug/l		22 ug/l	41 ug/l
Monochloroacetic acid (MCAA)		ND		ND		ND	2.9 ug/l
Trichloroacetic acid (TCAA)		4.3 ug/l		4.9 ug/l		13 ug/l	15 ug/l

Radio Chemicals waived until compliance 2014-2016 Due in 2023 Due every 9 years										
			results in		detetion					
			Ci/l		limits in		DATE	ESC SAMPLE #		
					Ci/l					
Gross Alpha			1.0		3		8/1/2014	L713630		
Gross Alpha-2 Sigma			0.4				8/1/2014			
Radium 226			1.0		1		8/1/2014			
Radium 226-2 Sigma			0.4				8/1/2014			
Radium 228			BDL		1		8/1/2014			
Radium 228-2 Sigma			0.28				8/1/2014			
LEAD										
LEAD action level 0.015 mg/l			90th % or site #27		result		DATE	ESC SAMPLE #		
average results for 30 tier 1 sites					ND		June 2020	L1227830		
Site #30 had a 0.00653 mg/l lead, only site over the 0.015 action level							June 2020			
COPPER										
COPPER action level 1.3 mg/l			90th % or site #27		0.134		June 2020			
average results for 30 tier 1 sites							June 2020			
Site #30 had a 0..147 mg/l copper, therefore all sites under the 1.3 action level										
LEAD AND COPPER COMPLIANCE DATE EACH 3 YEARS IN A COMPLIANCE PERIOD STARTING IN 1992. NEXT PERIOD IS 2021-2023. SCHEDULED FOR JUNE-SEPT. 2023. MAY BE ANY JUNE-SEPT PERIOD										
LEAD AND COPPER COMPLIANCE DATE EACH 3 YEARS IN A COMPLIANCE PERIOD STARTING IN 1992 MAKES THE COMPLIANCE PERIOD ONE YEAR OFF OF THE OTHER COMPLIANCE PERIODS DEFINED BY THE STATE.										
SUMMARY OF PARENT SYSTEM DATA FOR 2020 TITLED AS FOLLOWS:										
PLANT AND DIST. DATA SUMMARY FOR 2020										
	EFFLUENT TURBIDTY (NTU's)				BACTERIA ANALYSIS (number)					
2020	#TAKEN	LOW	HIGH	AVG	# TAKEN	#POS	#REPEATS			
Jan	186	0.03	0.18	0.0565	81	0	0			
Feb	174	0.05	0.08	0.0587	94	0	0			
March	186	0.03	0.08	0.058	94	0	0			
April	180	0.05	0.08	0.0583	95	0	0			
May	186	0.03	0.11	0.0577	96	0	0			
June	180	0.05	0.13	0.0616	94	1	3			
July	186	0.04	0.1	0.0636	97	0	0			
August	186	0.04	0.12	0.0613	97	0	0			
Sept	180	0.05	0.11	0.0618	94	0	0			
Oct	186	0.05	0.09	0.0613	97	0	0			
Nov	180	0.03	0.08	0.0594	94	0	0			
Dec	186	0.03	0.08	0.0603	91	0	0			
Total	2196		0.18	0.05988	1124					
PLANT AND DIST. DATA (in mg/l) SUMMARY FOR 2020										
	CHLORINE RESIDUALS-DIST				FLOURIDE DAILY PLANT AND DIST					
2020	#TAKEN	LOW	HIGH	AVG	#TAKEN	LOW	HIGH	AVG		
Jan	81	2.3	3.2	2.83	26	0.07	0.11	0.093		
Feb	94	1.9	3.2	2.7	22	0.07	0.10	0.074		
March	94	1.7	3.1	2.73	26	0.07	0.11	0.084		
April	95	1.9	3.1	2.67	24	0.05	0.09	0.0725		
May	96	1.9	3.0	2.71	28	0.06	0.08	0.075		
June	94	1.6	3.0	2.81	24	0.08	0.10	0.087		
July	97	1.8	3.1	2.68	28	0.08	0.11	0.091		
August	97	1.5	3.0	2.65	24	0.08	0.12	0.099		
Sept	94	1.5	3.2	2.71	24	0.08	0.10	0.09		
Oct	97	1.6	3.1	2.73	24	0.09	0.10	0.092		
Nov	94	1.6	3.1	2.66	24	0.06	0.15	0.107		
Dec	91	2.4	3.1	2.79	26	0.07	0.17	0.11		
Total	1124			2.7225	300					

PLANT AND DIST. DATA (in mg/l) SUMMARY FOR 2020									
2020	HARDNESS				HIGHEST pH of FINISHED WATER LEAVING THE PLANT				
	#TAKEN	LOW	HIGH	AVG	#TAKEN	LOW	HIGH	AVG	
Jan	31	70	84	77	31	8.2	8.5	8.3	
Feb	29	61	70	56	29	8.2	8.5	8.3	
March	31	54	62	57	31	8.2	8.4	8.3	
April	30	56	72	62	30	8.2	8.6	8.3	
May	31	60	78	66	31	8.1	8.4	8.2	
June	30	66	72	69	30	8.0	8.4	8.1	
July	31	68	80	75	31	8.0	8.4	8.2	
August	31	74	84	79	31	8.0	8.4	8.2	
Sept	30	70	80	76	30	8.0	8.4	8.2	
Oct	31	78	86	81	31	8.1	8.6	8.2	
Nov	30	82	88	84	30	8.0	8.4	8.2	
Dec	31	84	96	87	31	8.0	8.3	8.1	
Total	366			72.4167	366			8.21667	
DBP DATA (in ppb) FOR THE DISTRIBUTION SYSTEM									
2020	THM quarterly				THAA quarterly				
	HWY 70 E.	HWY 70 W	IRONWOOD GC	BUCK MTN	HWY 70 E.	HWY 70 W	IRONWOOD GC	BUCK MTN	
3/9/2020	0.0266	0.0241	0.0254	0.0345	0.0204	0.0201	0.0213	0.0266	
6/9/2020	0.0253	0.0148	0.0193	0.0268	0.0118	0.00919	0.0105	0.0159	
9/14/2020	0.0423	0.0445	0.0366	0.0485	0.0167	0.0163	0.0147	0.0208	
12/14/2020	0.0273	0.0288	0.0265	0.0327	0.0195	0.0187	0.0181	0.0196	
average for year	0.0304	0.0281	0.0270	0.0356	0.0171	0.0161	0.0162	0.0207	
MCL for THM's is 0.080 ppb for four quarter site running average									
MCL for THAA's is 0.060 ppb for four quarter site running average									
Total Trihalomethanes (THM's) are the sum total of four compounds formed when chlorine is added in the presence of natural organic matter (NOM's). The MCL for the summation of the four compounds is 0.080 parts per billion (ppb's) or 80 ppm's.									
These four compounds are Chloroform, Bromodichloromethane, Chlorobromomethane, and Bromoform.									
For the calendar year of 2018 (previous 4 quarters for 16 sites) we averaged 36.6 ppm's with 68 ppm's as the high and 16.3 ppm's as the lowest.									
Total Halogenated Acids (HAA's) are the sum total of five compounds formed in the presence of chlorine and NOM. The MCL for the summation of the five compounds is 0.060 ppb's or 60 ppm's.									
The five compounds are Bromoacetic acid, Chloroacetic acid, Dibromoacetic acid, Dichloroacetic acid, and Trichloroacetic acid.									