

NAME OF THE WATER UTILITY

City of Alcoa

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

NAME OF THE WATER TREATMENT PLANT

Alcoa Membrane WTP

Division of Water Supply

COUNTY

Blount

PWSID#

000007

COMPREHENSIVE MONTHLY OPERATION REPORT

December 2012

Date	Raw water treated X 1000 Gallons	Finished water X 1000 Gallons	Permeate water X 1000 Gallons	Raw Water Temperature °C	PHYSICAL AND CHEMICAL CHARACTERISTICS												CHEMICALS USED																					
					Turbidity NTU						Cl ₂ mg/L		Alkalinity mg/L		Hardness mg/L		pH			Fluoride mg/L			Calculated Dosages mg/L						Pounds per 24 Hours									
					FINISHED WATER TURBIDITY MUST BE MEASURED EVERY 4 HOURS AND RECORDED						Top of Filter	Lowest Plant Effluent	Total Raw	Total Finished	Raw	Finished	Raw	Mixed	Finished	Raw	Finished	Distribution	ACH	Pre Cl ₂	Post Cl ₂	Fluoride	Caustic Soda	ACH	Pre Cl ₂	Post Cl ₂	Fluoride	Caustic Soda						
					12-4	4-8	8-12	12-4	4-8	8-12																							AM	PM				
1	6220	5570	5680	8	1	.02	.02	.01	.02	.01	.01		2.14	69	69	69	70		7.8	7.6	8.0		.77		8		2.1	0.90	1.6			415		99	224	303		
2	8310	7480	7620	8	1	.01	.01	.01	.01	.01	.01		2.11	72	72	69	69		7.7	7.6	8.0		.81		8		2.1	0.90	1.6			554		133	301	407		
3	5530	5000	5100	9	1	.01	.01	.02	.02	.02	.02		2.11	72	72	70	70		7.8	7.6	8.0		.79	.79	8		2.2	0.90	1.6			369		94	201	272		
4	8180	7320	7460	9	1	.02	.01	.02	.01	.02	.02		2.16	74	74	70	69		7.8	7.6	8.0		.78	.70	8		2.2	0.90	1.6			546		137	295	398		
5	9220	8300	8410	11	1	.02	.02	.02	.02	.02	.02		2.23	75	74	70	69		7.8	7.5	8.0		.83	.69	8		2.2	0.90	1.6			615		154	332	449		
6	6520	5910	5990	11	1	.02	.02	.02	.02	.02	.02		2.21	73	74	69	70		7.6	7.5	8.0		.79	.74	8		2.2	0.90	1.7			435		110	237	340		
7	5600	5000	5110	11	1	.02	.02	.02	.02	.01	.02		2.21	70	76	70	69		7.5	7.6	8.1	.11	.74	.87	8		2.2	0.90	1.7			374		94	202	290		
8	7390	6610	6730	11	1	.02	.02	.01	.01	.01	.01		2.16	73	74	73	73		7.6	7.6	8.1		.74		8		2.2	0.90	1.7			493		123	266	382		
9	7870	7070	7180	12	1	.01	.02	.02	.02	.02	.02		2.20	75	74	74	73		7.6	7.6	8.1		.86		8		2.2	0.90	1.6			525		132	284	383		
10	6120	5460	5610	13	1	.02	.02	.02	.02	.02	.02		2.17	77	78	74	74		7.4	7.5	8.0		.85	.63	8		2.2	0.90	1.6			408		103	222	299		
11	6540	5830	5930	13	1	.02	.02	.01	.01	.01	.01		2.15	78	78	75	75		7.3	7.4	8.0		.71	.68	8		2.3	0.90	1.6			436		114	234	317		
12	6780	6100	6210	10	2	.01	.01	.01	.01	.02	.02		2.12	73	75	77	76		7.3	7.4	7.9		.74	.71	8		2.2	0.90	1.6			452		114	245	331		
13	6690	6000	6110	9	1	.02	.02	.02	.02	.02	.02		2.24	58	63	58	64		7.4	7.5	7.8		.75	.70	8		2.5	0.90	1.6			446		127	241	326		
14	8680	7790	7890	8	1	.02	.02	.01	.01	.01	.01		2.23	63	66	61	62		7.4	7.5	8.0	.14	.78	.81	8		2.3	0.90	1.6			579		151	312	421		
15	5810	5240	5300	7	1	.02	.01	.01	.02	.02	.01		2.21	66	67	68	70		7.5	7.5	8.0		.75		8		2.3	0.90	1.6			388		102	209	283		
16	7740	6970	7060	8	4	.01	.01	.01	.01	.01	.01		2.23	67	66	67	65		7.4	7.9	8.0		.77		8		2.3	0.90	1.6			516		135	279	377		
17	7050	6240	6380	10	15	.01	.01	.02	.02	.03	.02		1.95	58	67	68	70		7.2	7.2	7.9		.73	.84	9		2.7	0.90	1.6			529		144	252	341		
18	6700	5970	6090	11	8	.01	.01	.01	.01	.02	.02		2.15	43	54	43	56		7.1	7.1	7.8		.71	.92	8		2.7	0.90	1.9			447		137	241	386		
19	6040	5430	5500	10	5	.02	.02	.01	.01	.01	.01		2.12	49	50	50	48		7.2	7.1	7.9		.72	.85	8		2.7	0.90	2.0			403		124	217	367		
20	8410	7560	7680	9	5	.01	.01	.01	.01	.01	.01		2.31	49	50	50	48		7.3	7.2	7.9		.76	.95	8		2.4	0.90	2.0			561		154	303	512		
21	5570	5000	5090	9	21	.01	.01	.01	.02	.02	.02		2.13	50	51	55	47		7.2	7.2	8.0	.00	.71	.83	9		2.6	0.90	2.0			418		110	201	340		
22	6730	6010	6110	6	4	.02	.02	.02	.02	.02	.02		2.22	39	40	38	43		7.3	7.1	8.0		.68		8		2.5	0.90	2.0			449		127	241	408		
23	8820	7930	8010	6	1	.02	.02	.02	.02	.02	.02		2.37	45	45	45	41		7.5	7.2	8.0		.74		8		2.3	0.90	2.0			588		154	316	534		
24	5700	5060	5130	6	12	.02	.02	.02	.02	.02	.02		2.30	49	49	48	45		7.5	7.2	7.9		.75		9		2.4	0.90	2.0			428		103	203	342		
25	5850	5000	5080	9	17	.01	.02	.02	.02	.02	.02		1.87	40	46	44	45		7.2	7.1	7.9		.70		8		2.8	0.90	2.0			390		119	201	339		
26	7550	6760	6860	10	10	.02	.02	.02	.01	.01	.02		2.30	40	46	40	41		7.2	7.1	7.8		.68	.73	8		2.5	0.90	2.0			504		143	271	458		
27	8910	8000	8100	10	7	.01	.01	.02	.02	.02	.02		2.15	34	40	38	43		7.0	6.9	7.8		.73	.64	8		2.5	0.90	2.2			594		169	320	594		
28	5680	5140	5200	7	3	.02	.02	.01	.01	.01	.01		2.35	37	38	38	36		7.3	7.0	8.0	.13	.73	.79	8		2.4	0.90	2.5			379		104	205	434		
29	6170	5530	5640	8	2	.01	.01	.01	.02	.02	.02		2.35	41	42	64	63		7.3	7.1	8.1		.71		8		2.3	0.90	2.4			412		108	223	452		
30	8350	7490	7600	7	2	.01	.01	.01	.02	.02	.02		2.32	44	45	65	64		7.4	7.2	8.1		.73		8		2.3	0.90	2.3			557		146	300	583		
31	7200	6430	6550	6	1	.02	.02	.02	.02	.02	.02		2.32	51	51	60	57		7.3	7.2	8.0		.75	.74	8		2.3	0.90	2.3			480		126	259	503		
TOT	217930	195200	198410	282	133	.49	.49	.47	.50	.52	.52		68.09	1804	1866	1860	1865		229.9	227.8	247.1	.38	23.29	14.61	251		73.1	27.9	57.1			14693		3890	7838	12170		
AVE	7030	6297	6400	9	4	.02	.02	.02	.02	.02	.02		2.20	58	60	60	60		7.4	7.3	8.0	.10	0.75	0.77	8		2.4	0.90	1.8			474		125	253	393		
MAX	9220	8300	8410	13	21	.02	.02	.02	.02	.03	.02		2.37	78	78	77	76		7.8	7.9	8.1	.14	0.86	0.95	9		2.8	0.90	2.5			615		169	332	594		
MIN	5530	5000	5080	6	1	.01	.01	.01	.01	.01	.01		1.87	34	38	38	36		7.0	6.9	7.8	.00	0.68	0.63	8		2.1	0.90	1.6			369		94	201	272		

CHEMICALS USED	BRAND	ANALYSIS	POUNDS USED	COSTS	
				per lb	per month
ACH - DeIPAC XG	USALCO	100%	14693	\$0.24600	\$3,614.50
Chlorine	Sullivan Corp.	100%	3890	\$0.1750	\$680.70
Fluoride	Dycho	24%	7838	\$0.24700	\$1,935.94
Caustic Soda	Dycho	25%	12170	\$0.35400	\$1,077.04
TOTAL					\$7,308.18

I certify that the data provided accurately represents the water quality, quantity, treatment, operational practices, and other activities for the reporting period specified herein.

Certified Operator Name _____

Certified Operator Signature _____

