Name of Firm Shelby Co. Juvenile Crt

Address Memphis TN

Attn. of Steve Cole

Copy to Terry Seamon

Date 6/9/15 Time TUES

WATER SERVICES, INCORPORATED

P.O. Box 22339 - Lovell Rd.
Knoxville, Tennessee 37933-0339
(A.C. 865) Telephone 966-5851
Fax (865) 966-5860

AIR CONDITIONING SERVICE CONTROL REPORT

Control Tests	Control Ranges	System (Name or No.) N	S	Chill	Hot
pH	8.0/9.0	8.9	8.8	9.0	9.2
Conductivity	800/1000	1200	450	2600	2300
BT	.05/.1	.06	.03	—	—
Slime	Ø	Ø	Ø	—	—
Algae	Ø	Ø	Ø	—	—
Nitrite	400/600	—		480	—
NAMDy	25/40	—		—	880
Pump					
Manual					
Method of Application					
Bleed control: TAM					
Timer					
Manual					
Operating Data					
Hours/day					
Days/week					
Date Last Washed					
Temp Drop °F					
Head Pressure					
Pressure Drop					
Percent Load					

CHEMICAL DOSAGES (List Product Used)

Chemical Products	Inventory Lbs.	Standby Inventory Lbs.			
CM719BT	140#				
BAF136	70#				
Clearhold	100#				
Scale TROL LSR2200	100#				

METHOD OF APPLICATION OF CHEMICALS

Product CM719				
Pump Model No.	100	N		
Stroke Setting	100	S		
Timer Setting				
No. of Trippers				
Product BAF136				
Pump Model No.				
Stroke Setting	100	N		
Timer Setting	100	S		
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				

Special Instructions Recalibrated controller for South tower. Hooked up new drum CM719 + primed all pumps.

Comments North tower showed high conductivity due to chemical feed line being air locked. Bled air and is now bleeding tower water properly. South tower showed low conductivity and treatment to prevent scale + algae. Chill + Hot loops show proper treatment to prevent corrosion.

This Report Reviewed & Signed By [signature]

Field Engineer [signature]

CUSTOMER'S COPY

Name of Firm Shelby Co. Juvenile Crt.

Address Memphis, TN

Attn. of Steve Cole

Copy to Terry Seamon

Date 6/9/15 Time TUES

WATER SERVICES, INCORPORATED

P.O. Box 22339 - Lovell Rd.
Knoxville, Tennessee 37933-0339
(A.C. 865) Telephone 966-5851
Fax (865) 966-5860

AIR CONDITIONING SERVICE CONTROL REPORT

Control Tests	Control Ranges	System (Name or No.) N	S	Chill	Hot
pH	8.0/9.0	8.9	8.8	9.0	9.2
Conductivity	800/1000	1200	450	2600	2300
BT	.05/.1	.06	.03	—	—
Slime	Ø	Ø	Ø	—	—
Algae	Ø	Ø	Ø	—	—
Nitrite	400/600	—		480	—
NAMOy	25/40	—		—	880
Pump					
Manual					
Method of Application					
Bleed control: TAM					
Timer					
Manual					
Operating Data					
Hours/day					
Days/week					
Date Last Washed					
Temp Drop °F					
Head Pressure					
Pressure Drop					
Percent Load					

CHEMICAL DOSAGES (List Product Used)

Chemical Products	Inventory Lbs.	Standby Inventory Lbs.			
CM719	140#				
BAF136	70#				
Clearhib 2	100#				
Scale TRQ LSR220	100#				

METHOD OF APPLICATION OF CHEMICALS

Product CM719				
Pump Model No.	100	N		
Stroke Setting	100	S		
Timer Setting				
No. of Trippers				
Product BAF-B6				
Pump Model No.				
Stroke Setting	100	N		
Timer Setting	100	S		
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				

Special Instructions Recalibrated controller for South tower. Hooked up new drum CM719 + primed all pumps.

Comments North tower showed high conductivity due to chemical feed line being air locked. Bled air and is now bleeding tower water properly. South tower showed low conductivity and treatment to prevent scale + algae. Chill + Hot loops show proper treatment to prevent corrosion.

This Report Reviewed & Signed By [signature]

Field Engineer [signature]

CUSTOMER'S COPY

Name of Firm Shelby Co. Juvenile Crt.

Address Memphis TN

Attn. of Steve Cole

Copy to Terry Seamon

Date 2/9/15 Time MON

WATER SERVICES, INCORPORATED

P.O. Box 22339 - Lovell Rd.
Knoxville, Tennessee 37933-0339
(A.C. 865) Telephone 966-5851
Fax (865) 966-5860

AIR CONDITIONING SERVICE CONTROL REPORT

Control Tests	Control Ranges	System (Name or No.) N	S	Chill/Hot	Blr.
pH	8.0/9.0	8.4	8.5	9.0/9.2	9.8
Conductivity	800/1000	300	600	2500/2650	4000
BT	.05/.1	.03	.05	—	—
Slime	Ø	Ø	Ø	—	—
Algae	Ø	Ø	Ø	—	—
Nitrite	400/600	—	—	560 c	—
NAMO4	25/40	—	—	800 #	25
Pump					
Manual					
Method of Application					
Bleed control: TAM					
Timer					
Manual					
Operating Data					
Hours/day					
Days/week					
Date Last Washed					
Temp Drop °F					
Head Pressure					
Pressure Drop					
Percent Load					

CHEMICAL DOSAGES (List Product Used)

Chemical Products	Inventory Lbs.	Standby Inventory Lbs.			
CM719	230#				
BAF136	120#				
Cleanhit 2V	130#				
ScaleTROL LSR220C	120#				

METHOD OF APPLICATION OF CHEMICALS

Product CM719	N	S		
Pump Model No.				
Stroke Setting	100	100	50	50
Timer Setting	100	100	50	50
No. of Trippers				
Product BAF136				
Pump Model No.				
Stroke Setting	100	100		
Timer Setting	100	100		
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				

Special Instructions Add ScaleTROL LSR 220C to boiler after you blowdown boiler.

Comments Towers show low conductivity and treatment due to cool outside temps and towers not running as much. Chill and hot loops both show treatment to prevent corrosion. Boiler shows slightly low treatment to prevent scale and high conductivity.

This Report Reviewed & Signed By [signature]

Field Engineer [signature]

CUSTOMER'S COPY

WATER SERVICES, INCORPORATED

P.O. Box 22339 - Lovell Rd.
Knoxville, Tennessee 37933-0339
(A.C. 865) Telephone 966-5851
Fax (865) 966-5860

AIR CONDITIONING SERVICE CONTROL REPORT

Name of Firm: Shelby Co. Juvenile Crt.

Address: Memphis TN

Attn. of: Steve Cole

Copy to: Jerry Seamon

Date: 2/9/15 Time: MON

Control Tests	Control Ranges	System (Name or No.) N	S	Chill/Hot	Blr.
pH	8.0/9.0	8.4	8.5	9.0/9.2	9.8
Conductivity	800/1000	300	600	2500/2650	4000
BT	.05/.1	.03	.05	—	—
Slime	Ø	Ø	Ø	—	—
Algae	Ø	Ø	Ø	—	—
Nitrite	400/600	—	—	560 C	—
NAMO4	25/40	—	—	800 H	25
Pump					
Manual					
Method of Application					
Bleed control: TAM					
Timer					
Manual					
Operating Data					
Hours/day					
Days/week					
Date Last Washed					
Temp Drop °F					
Head Pressure					
Pressure Drop					
Percent Load					

CHEMICAL DOSAGES (List Product Used)

Chemical Products	Inventory Lbs.	Standby Inventory Lbs.			
CM719	230#				
BAF136	120#				
Clearhi82V	130#				
ScaleTROL LSR220C	120#				

METHOD OF APPLICATION OF CHEMICALS

	N	S		
Product CM719				
Pump Model No.				
Stroke Setting	100	100	50	50
Timer Setting	100	100	50	50
No. of Trippers				
Product BAF136				
Pump Model No.				
Stroke Setting	100	100		
Timer Setting	100	100		
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				

Special Instructions: Add ScaleTROL LSR 220C to boiler after you blowdown boiler.

Comments: Towers show low conductivity and treatment due to cool outside temps and towers not running as much. Chill and hot loops both show treatment to prevent corrosion. Boiler shows slightly low treatment to prevent scale and high conductivity.

This Report Reviewed & Signed By: [signature]

Field Engineer: [signature]

CUSTOMER'S COPY

Name of Firm Shelby Co. Juvenile Crt.

Address Memphis, TN

Attn. of Steve Cole

Copy to Terry Seaman

Date 1/13/15 Time TUES

WATER SERVICES, INCORPORATED

P.O. Box 22339 - Lovell Rd.
Knoxville, Tennessee 37933-0339
(A.C. 865) Telephone 966-5851
Fax (865) 966-5860

AIR CONDITIONING SERVICE CONTROL REPORT

Control Tests	Control Ranges	System (Name or No.) N	S	Chill/Hot	Blr.
pH	8.0/9.0	8.7	8.9	9.0/9.2	10.0
Conductivity	800/1000	300	500	2500/2650	2400
BT	.05/.1	.03	.05	—	—
Slime	Ø	Ø	Ø	—	—
Algae	Ø	Ø	Ø	—	—
Nitrite	400/600	—	—	320 C	—
Nancy	25/40	—	—	800 H	80
Pump					
Manual					
Method of Application					
Bleed control: TAM					
Timer					
Manual					
Operating Data					
Hours/day					
Days/week					
Date Last Washed					
Temp Drop °F					
Head Pressure					
Pressure Drop					
Percent Load					

CHEMICAL DOSAGES (List Product Used)

Chemical Products	Inventory Lbs.	Standby Inventory Lbs.			
CM719	250				
BAF136	5#				
Clearhib V	130#				
Scale Tre LSR220L	120#				

METHOD OF APPLICATION OF CHEMICALS

	N	S		
Product CM719				
Pump Model No.				
Stroke Setting	100	100	50	50
Timer Setting	100	100	50	50
No. of Trippers				
Product BAF136				
Pump Model No.				
Stroke Setting	100	100		
Timer Setting	100	100		
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				

Special Instructions Order 2- 5 gal BAF136
Added 2 gallons Clearhib V to Chill loop

Comments Towers show low conductivity and low treatment levels due to cool outside temps and towers not running. Chill loop showed low treatment to prevent corrosion. Hot + Boiler show proper treatment to prevent scale + corrosion.

This Report Reviewed & Signed By Wm T Seaman

Field Engineer [signature]

CUSTOMER'S COPY

Name of Firm Shelby Co Juvenile Crt.

Address Memphis, TN

Attn. of Steve Cole

Copy to Terry Seaman

Date 1/13/15 Time TUES

WATER SERVICES, INCORPORATED

P.O. Box 22339 - Lovell Rd.
Knoxville, Tennessee 37933-0339
(A.C. 865) Telephone 966-5851
Fax (865) 966-5860

AIR CONDITIONING SERVICE CONTROL REPORT

Control Tests	Control Ranges	System (Name or No.) N	S	Chill/Hot	Blr.
pH	8.0/9.0	8.7	8.9	9.0/9.2	10.0
Conductivity	800/1000	300	500	2500/2650	2400
BT	.05/.1	.03	.05	—	—
Slime	Ø	Ø	Ø	—	—
Algae	Ø	Ø	Ø	—	—
Nitrite	400/600	—	—	320 C	—
NAMUy	25/40	—	—	800 H	80
Pump					
Manual					
Method of Application					
Bleed control: TAM					
Timer					
Manual					
Operating Data					
Hours/day					
Days/week					
Date Last Washed					
Temp Drop °F					
Head Pressure					
Pressure Drop					
Percent Load					

CHEMICAL DOSAGES (List Product Used)

Chemical Products	Inventory Lbs.	Standby Inventory Lbs.			
CM719	250				
BAF136	5#				
Clearhib V	130#				
Scale IRL LSR220L	120#				

METHOD OF APPLICATION OF CHEMICALS

Product CM719	N	S		
Pump Model No.				
Stroke Setting	100	100	50	50
Timer Setting	100	100	50	50
No. of Trippers				
Product BAF136				
Pump Model No.				
Stroke Setting	100	100		
Timer Setting	100	100		
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				

Special Instructions Order 2 - 5 gal BAF136
Added 2 gallons Clearhib V to Chill loop

Comments Towers show low conductivity and low treatment levels due to cool outside temps and towers not running. Chill loop showed low treatment to prevent corrosion. Hot + Boiler show proper treatment ~~to prevent~~ scale + corrosion.

This Report Reviewed & Signed By [signature]

Field Engineer [signature]

CUSTOMER'S COPY

WATER SERVICES, INCORPORATED

P.O. Box 22339 - Lovell Rd.
Knoxville, Tennessee 37933
(A.C. 865) Telephone 966-5851
FAX (865) 966-5860

BOILER SERVICE CONTROL REPORT

Name of Firm: Shelby Co Juvenile Cot.

Address: Memphis, TN

Attn. of: Steve & Cole

Copy to: Terry Seamon

Date: 12/8/14 Time: MON

Control Tests	Control Ranges	Test Results N	S	Chill	Hot	Blr.
pH	8.0/9.0	8.6	8.7	9.0	9.2	10.0
Conductivity	800/1000	350	300	2500	2500	2400
BT	.05/.1	.02	.03	—	—	—
Slime	Ø	Ø	Ø	—	—	—
Algae	Ø	Ø	Ø	—	—	—
Nitrite	400/600	—	—	480c	—	—
NAMO4	25/40	—	—	—	800H	40
Condensate pH						
Condensate Conductivity						
FW °F						
Condensate Hardness						

Other Equip.

Chemical Product	Inventory (lbs.)	Standby Inventory Lbs.	Chemical Dosages For Boiler(s)		
CM719	270#				
BAF136	30#				
Clearhib 2V	150#				
Scale Trol LSR220C	135#				

	N	S
Type of Feed		
Continuous CM719		
Other	100	100
Time Last Dosage	100	100
Blowdown		
Manual: Rate: Times BAF136		
Continuous: Rate	100	100
Automatic Monitor	100	100
Operating Data		
Hours/day		
Days/week		
Date Last Washed		

Special Instructions

Comments: N + S towers both show low conductivity and treatment to prevent scale + algae due to cool outside temps and not running. Chill + Hot loops both show treatment to prevent corrosion. Boiler shows treatment to prevent scale + corrosion.

This Report Reviewed & Signed By: [signature]

Field Engineer: [signature]

CUSTOMER'S COPY

WATER SERVICES, INCORPORATED

P.O. Box 22339 - Lovell Rd.
Knoxville, Tennessee 37933
(A.C. 865) Telephone 966-5851
FAX (865) 966-5860

BOILER SERVICE CONTROL REPORT

Name of Firm: Shelby Co Juvenile Cot.

Address: Memphis, TN

Attn. of: Steve & Cole

Copy to: Terry Seamon

Date: 12/8/14 Time: MON

Control Tests	Control Ranges	Test Results N	S	Chill	Hot	Blr.	Chemical Product	Inventory (lbs.)	Standby Inventory Lbs.	Chemical Dosages For Boiler(s)		
pH	8.0/9.0	8.6	8.7	9.0	9.2	10.0	CM719	270#				
Conductivity	800/1000	350	300	2500	2500	2400	BAF136	30#				
BT	.05/.1	.02	.03	—	—	—	Clearchib2V	150#				
Slime	Ø	Ø	Ø	—	—	—	ScaleTROL LSR220C	135#				
Algae	Ø	Ø	Ø	—	—	—						
Nitrite	400/600	—	—	480c	—	—						
NAMOy	25/40	—	—	—	800H	40						
Condensate pH												
Condensate Conductivity												
FW °F												
Condensate Hardness												

Other Equip.

		N	S		
Type of Feed					
Continuous	CM719	N	S		
Other		100	100		
Time Last Dosage		100	100		
Blowdown					
Manual: Rate: Times	BAF136				
Continuous: Rate		100	100		
Automatic Monitor		100	100		
Operating Data					
Hours/day					
Days/week					
Date Last Washed					

Special Instructions

Comments: N + S towers both show low conductivity and treatment to prevent scale + algae due to cool outside temps and not running. Chill + Hot loops both show treatment to prevent corrosion. Boiler shows treatment to prevent scale + corrosion.

This Report Reviewed & Signed By: [signature]

Field Engineer: [signature]

CUSTOMER'S COPY

Name of Firm: Shelby Co. Juvenile Crt.

Address: Memphis, TN

Attn. of: Keith Carter / Steve Cole

Copy to: Terry Seamon

Date: 11/13/14 Time: THURS

WATER SERVICES, INCORPORATED

P.O. Box 22339 - Lovell Rd.
Knoxville, Tennessee 37933-0339
(A.C. 865) Telephone 966-5851
Fax (865) 966-5860

AIR CONDITIONING SERVICE CONTROL REPORT

Control Tests	Control Ranges	Towers N	Towers S	Chill/Hot	Blr.
pH	8.0/9.0	8.6	8.5	9.8/9.6	10.0
Conductivity	800/1000	400	500	2591/2300	2400
BT	.05/.1	Ø.08	Ø.08	—	—
Slime	Ø	Ø	Ø	—	—
Algae	Ø	Ø	Ø	—	—
Nitrite	400/600	—	—	480C	—
NAMO	25/40	—	—	800#	40
Pump					
Manual					
Method of Application					
Bleed control: TAM					
Timer					
Manual					
Operating Data					
Hours/day					
Days/week					
Date Last Washed					
Temp Drop °F					
Head Pressure					
Pressure Drop					
Percent Load					

System (Name or No.)

CHEMICAL DOSAGES (List Product Used)

Chemical Products	Inventory Lbs.	Standby Inventory Lbs.			
CM719	270#				
BAF136	50#				
Clearbit2V	150#				
ScaleTROL LSR220C	135#				

METHOD OF APPLICATION OF CHEMICALS

	N	S		
Product CM719				
Pump Model No.				
Stroke Setting	100	100	50	50
Timer Setting	100	100	50	50
No. of Trippers				
Product BAF136				
Pump Model No.				
Stroke Setting	100	100		
Timer Setting	100	100		
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				

Special Instructions: Plugged in CM719 pumps to tower and added treatment to prevent scale. Unplug all pumps + controllers when towers not running

Comments: N+S towers both show slightly low conductivity due to cool outside temps. N+S towers show no scale inhibitor due to pumps unplugged. Chill + Hot loops both show treatment to prevent corrosion. Boiler shows treatment to prevent scale.

This Report Reviewed & Signed By: [signature]

Field Engineer: [signature]

CUSTOMER'S COPY

Name of Firm: Shelby Co. Juvenile Crt.

Address: Memphis, TN

Attn. of: Keith Curtar / Steve Cole

Copy to: Terry Seamon

Date: 11/13/14 Time: THURS

WATER SERVICES, INCORPORATED

P.O. Box 22339 - Lovell Rd.
Knoxville, Tennessee 37933-0339
(A.C. 865) Telephone 966-5851
Fax (865) 966-5860

AIR CONDITIONING SERVICE CONTROL REPORT

Control Tests	Control Ranges	System (Name or No.): Towers N	Towers S	Chill/Hot	Blr.
pH	8.0/9.0	8.6	8.5	9.8/9.6	10.0
Conductivity	800/1000	400	500	2500/2300	2400
BT	.05/.1	Ø.08	Ø.05	—	—
Slime	Ø	Ø	Ø	—	—
Algae	Ø	Ø	Ø	—	—
Nitrite	400/600	—	—	480C	—
NAMO4	25/40	—	—	800#	40
Pump					
Manual					
Method of Application					
Bleed control: TAM					
Timer					
Manual					
Operating Data					
Hours/day					
Days/week					
Date Last Washed					
Temp Drop °F					
Head Pressure					
Pressure Drop					
Percent Load					

CHEMICAL DOSAGES (List Product Used)

Chemical Products	Inventory Lbs.	Standby Inventory Lbs.			
CM719	270#				
BAF136	50#				
ClearbtZV	150#				
ScaleTROL LSR220C	135#				

METHOD OF APPLICATION OF CHEMICALS

	N	S		
Product CM719				
Pump Model No.				
Stroke Setting	100	100	50	50
Timer Setting	100	100	50	50
No. of Trippers				
Product BAF136				
Pump Model No.				
Stroke Setting	100	100		
Timer Setting	100	100		
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				

Special Instructions: Plugged in CM719 pumps to towers and added treatment to prevent scale. Unplug all pumps + controllers when towers not running

Comments: N+S towers both show slightly low conductivity due to cool outside temps N+S towers show no scale inhibitor due to pumps unplugged. Chill + Hot loops both show treatment to prevent corrosion. Boiler shows treatment to prevent scale.

This Report Reviewed & Signed By: [signature]

Field Engineer: [signature]

CUSTOMER'S COPY

Name of Firm Shelby Co. Juvenile Court

Address Memphis, TN

Attn. of Keith Carter / Steve Cole

Copy to Terry Seamon

Date 9/ /14 Time

WATER SERVICES, INCORPORATED

P.O. Box 22339 - Lovell Rd.
Knoxville, Tennessee 37933-0339
(A.C. 865) Telephone 966-5851
Fax (865) 966-5860

AIR CONDITIONING SERVICE CONTROL REPORT

Control Tests	Control Ranges	Towers System (Name or No.) N	S	Chill	Hot
pH	8.0/9.0	9.0	8.9	9.6	9.5
Conductivity	800/1000	750	250	2500	2300
BT	.05/.1	—	—	—	—
Slime	Ø	Ø	Ø	—	—
Algae	Ø	Ø	Ø	—	—
Nitrite	400/600	—	—	560	800
NaMO4	25/40	—			
NaMO4	2/4 Pump	6	2		
	Manual				
Method of Application					
Bleed control: TAM					
Timer					
Manual					
Operating Data					
Hours/day					
Days/week					
Date Last Washed					
Temp Drop °F					
Head Pressure					
Pressure Drop					
Percent Load					

CHEMICAL DOSAGES (List Product Used)

Chemical Products	Inventory Lbs.	Standby Inventory Lbs.			
CM719	200#				
BAF136	75#				
Clearh.62V	150#				
ScaleTROL LSR220C	135#				

METHOD OF APPLICATION OF CHEMICALS

	N	S		
Product CM719				
Pump Model No.				
Stroke Setting	100	100		
Timer Setting	100	100		
No. of Trippers				
Product BAF136				
Pump Model No.				
Stroke Setting	100	100		
Timer Setting	100	100		
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				

Special Instructions South tower has been turned up so conductivity will rise. South tower shows good treatment. Hooked up new CM719 drum + primed all pumps.

Comments North tower shows proper conductivity and treatment to prevent scale + algae growth. South tower shows low conductivity ~~to prevent~~ due to programmer out of calibration. Chill + Hot loops both show treatment to prevent corrosion.

This Report Reviewed & Signed By [signature]

Field Engineer [signature]

CUSTOMER'S COPY

Name of Firm Shelby Co. Juvenile Court

Address Memphis, TN

Attn. of Keith Carter / Steve Cole

Copy to Terry Seamon

Date 9/ /14 Time

WATER SERVICES, INCORPORATED

P.O. Box 22339 - Lovell Rd.
Knoxville, Tennessee 37933-0339
(A.C. 865) Telephone 966-5851
Fax (865) 966-5860

AIR CONDITIONING SERVICE CONTROL REPORT

Control Tests	Control Ranges	Towers System (Name or No.) N	S	Chill	Hot
pH	8.0/9.0	9.0	8.9	9.6	9.5
Conductivity	800/1000	750	250	2500	2300
BT	.05/.1	—	—	—	—
Slime	Ø	Ø	Ø	—	—
Algae	Ø	Ø	Ø	—	—
Nitrite	400/600	—	—	560	800
NAMO4	25/40	—			
NAMO4	2/4 Pump / Manual	6	2		
Method of Application					
Bleed control: TAM					
Timer					
Manual					
Operating Data					
Hours/day					
Days/week					
Date Last Washed					
Temp Drop °F					
Head Pressure					
Pressure Drop					
Percent Load					

CHEMICAL DOSAGES (List Product Used)

Chemical Products	Inventory Lbs.	Standby Inventory Lbs.			
CM719	200#				
BAF136	75#				
Clearh.62V	150#				
ScaleTROL LSR220C	135#				

METHOD OF APPLICATION OF CHEMICALS

	N	S		
Product CM719				
Pump Model No.				
Stroke Setting	100	100		
Timer Setting	100	100		
No. of Trippers				
Product BAF136				
Pump Model No.				
Stroke Setting	100	100		
Timer Setting	100	100		
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				

Special Instructions South tower has been turned up so conductivity will rise. South tower shows good treatment. Hooked up new CM719 drum + primed all pumps

Comments North tower shows proper conductivity and treatment to prevent scale + algae growth. South tower shows low conductivity ~~[illegible]~~ due to programmer out of calibration. Chill + Hot loops both show treatment to prevent corrosion.

This Report Reviewed & Signed By

Field Engineer [signature]

CUSTOMER'S COPY

WATER SERVICES, INCORPORATED

P.O. Box 22339 - Lovell Rd.
Knoxville, Tennessee 37933
(A.C. 865) Telephone 966-5851
FAX (865) 966-5860

~~BOILER~~ SERVICE CONTROL REPORT
Ale

Name of Firm: Shelby Co. Juvenile Crt.
Address: Memphis, TN
Attn. of: Keith Carter / Steve Cole
Copy to: Terry Scamon
Date: 7/ /14 Time: TUES

Control Tests	Control Ranges	Towers N	Towers S	Test Results	Chill	Hot	Chemical Product	Inventory (lbs.)	Standby Inventory Lbs.	Chemical Dosages For Boiler(s)		
pH	8.0/9.0	8.4	8.7		9.8	9.7	CM719BT	45#				
Conductivity	800/1000	650	850		2500	2600	BAF136	90#				
BT	.05/.1	.02	.08		—	—	Clearhib V	20#				
Slime	Ø	Ø	Ø		—	—	Scaletrol LSR220C	135#				
Algae	Ø	Ø	Ø		—	—						
Nitrite	400/600	—	—		680	800						
NAMO$_4$	45/90	—	—		—	—						
Condensate pH												
Condensate Conductivity												
FW °F												
Condensate Hardness												

Type of Feed

Continuous	CM719	N	S		
Other		100	100		
Time Last Dosage		100	100		
Blowdown					
Manual: Rate: Times	134	F136			
Continuous: Rate		100	100		
Automatic Monitor		100	100		
Operating Data					
Hours/day					
Days/week					
Date Last Washed					

Other Equip.

Special Instructions: Order 3 - 15 gal CM719BT, 1 - 15 gal ClearhibV, Installed 3 times in North tower to add CM719BT

Comments: South tower shows proper balance between conductivity and treatment to prevent scale + biological growth. North tower shows slightly low treatment to prevent scale with proper treatment to prevent algae. Chill + Hot loops both show treatment to prevent corrosion

This Report Reviewed & Signed By

Field Engineer

CUSTOMER'S COPY

WATER SERVICES, INCORPORATED

P.O. Box 22339 - Lovell Rd.
Knoxville, Tennessee 37933
(A.C. 865) Telephone 966-5851
FAX (865) 966-5860

~~BOILER~~ SERVICE CONTROL REPORT
A/C

Name of Firm: Shelby Co. Juvenile Crt.
Address: Memphis, TN
Attn. of: Keith Carter / Steve Cole
Copy to: Terry Scamon
Date: 7/ /14 Time: TUES

Control Tests	Control Ranges	Towers N	Towers S	Test Results	Chill	Hot
pH	8.0/9.0	8.4	8.7		9.8	9.7
Conductivity	800/1000	650	850		2500	2600
BT	.05/.1	.02	.08		—	—
Slime	Ø	Ø	Ø		—	—
Algae	Ø	Ø	Ø		—	—
Nitrite	400/600	—	—		680	800
NAMO$_4$	45/90	—	—		—	—
Condensate pH						
Condensate Conductivity						
FW °F						
Condensate Hardness						

Chemical Product	Inventory (lbs.)	Standby Inventory Lbs.	Chemical Dosages For Boiler(s)		
CM719BT	45#				
BAF136	90#				
Clearch 62V	20#				
ScaleTROL LSR220C	135#				

Type of Feed					
Continuous	CM719	N	S		
Other		100	100		
Time Last Dosage		100	100		
Blowdown					
Manual: Rate: Times	BAF136				
Continuous: Rate		100	100		
Automatic Monitor		100	100		
Operating Data					
Hours/day					
Days/week					
Date Last Washed					

Other Equip.

Special Instructions: Order 3 - 15 gal CM719BT, 1 - 15 gal Clearch 62V, Installed 3 times in North tower to add CM719BT

Comments: South tower shows proper balance between conductivity and treatment to prevent scale + biological growth. North tower shows slightly low treatment to prevent scale with proper treatment to prevent algae. Chill + Hot loops both show treatment to prevent corrosion.

This Report Reviewed & Signed By

Field Engineer

CUSTOMER'S COPY

Name of Firm Shelby Co. Juvenile Crt.

Address Memphis, TN

Attn. of Keith Carter / Steve Cole

Copy to Terry Seamon

Date 6/3/14 Time TUES

WATER SERVICES, INCORPORATED

P.O. Box 22339 - Lovell Rd.
Knoxville, Tennessee 37933-0339
(A.C. 865) Telephone 966-5851
Fax (865) 966-5860

AIR CONDITIONING SERVICE CONTROL REPORT

Control Tests	Control Ranges	Towers System (Name or No.) N	S	Chill	Hot
pH	8.0/9.0	8.9	8.7	8.9	9.2
Conductivity	800/1000	900	2800	2600	2500
BT	.05/.1	.1	.3	—	—
Slime	Ø	Ø	Ø	—	—
Algae	Ø	Ø	Ø	—	—
Nitrite	400/600	—	—	600	1000
$NAMO_4$	45/90	—		—	—
Pump					
Manual					
Method of Application					
Bleed control: TAM					
Timer					
Manual					
Operating Data					
Hours/day					
Days/week					
Date Last Washed					
Temp Drop °F					
Head Pressure					
Pressure Drop					
Percent Load					

CHEMICAL DOSAGES (List Product Used)

Chemical Products	Inventory Lbs.	Standby Inventory Lbs.			
CM719BT	160#				
BAF136	100#				
Clearhib2V	60#				
ScaleTROL LSR220L	130#				

METHOD OF APPLICATION OF CHEMICALS

	N	S		
Product CM719				
Pump Model No.				
Stroke Setting	100	100		
Timer Setting	100	100		
No. of Trippers				
Product BAF136				
Pump Model No.				
Stroke Setting	100	100		
Timer Setting	100	100		
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				

Special Instructions South tower shows high conductivity due to bleed solenoid not working. No South tower is scaling due to bleed solenoid not working.

Comments North tower shows proper balance between conductivity and treatment to prevent scale + algae growth Chill + Hot loops both show treatment to prevent corrosion South tower is high showing high conductivity.

This Report Reviewed & Signed By [signature]

Field Engineer [signature]

CUSTOMER'S COPY

Name of Firm Shelby Co. Juvenile Crt.

Address Memphis, TN

Attn. of Keith Carter / Steve Cole

Copy to Terry Seamon

Date 6/3/14 Time TUES

WATER SERVICES, INCORPORATED

P.O. Box 22339 - Lovell Rd.
Knoxville, Tennessee 37933-0339
(A.C. 865) Telephone 966-5851
Fax (865) 966-5860

AIR CONDITIONING SERVICE CONTROL REPORT

Control Tests	Control Ranges	System (Name or No.) Towers N	S	Chill	Hot
pH	8.0/9.0	8.9	8.7	8.9	9.2
Conductivity	800/1000	900	2800	2600	2500
BT	.05/.1	.1	.3	—	—
Slime	Ø	Ø	Ø	—	—
Algae	Ø	Ø	Ø	—	—
Nitrite	400/600	—	—	680	1000
NAMO4	45/90	—		—	—
Pump					
Manual					
Method of Application					
Bleed control: TAM					
Timer					
Manual					
Operating Data					
Hours/day					
Days/week					
Date Last Washed					
Temp Drop °F					
Head Pressure					
Pressure Drop					
Percent Load					

CHEMICAL DOSAGES (List Product Used)

Chemical Products	Inventory Lbs.	Standby Inventory Lbs.			
CM719BT	160#				
BAF136	100#				
Clearhib2V	60#				
ScaleTROL LSR220L	130#				

METHOD OF APPLICATION OF CHEMICALS

	N	S		
Product CM719				
Pump Model No.				
Stroke Setting	100	100		
Timer Setting	100	100		
No. of Trippers				
Product BAF136				
Pump Model No.				
Stroke Setting	100	100		
Timer Setting	100	100		
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				
Product				
Pump Model No.				
Stroke Setting				
Timer Setting				
No. of Trippers				

Special Instructions South tower shows high conductivity due to bleed solenoid not working. No
South tower is scaling due to bleed solenoid not working

Comments North tower shows proper balance between conductivity and treatment to prevent scale + algae growth Chill + Hot loops both show treatment to prevent corrosion
South tower is high showing high conductivity.

This Report Reviewed & Signed By [signature]

Field Engineer [signature]

CUSTOMER'S COPY