

1112 Manatee Avenue West Bradenton, FL 34205

purchasing@mymanatee.org

Solicitation Addendum

Addendum No.: 2

Solicitation No.: 24-R084454DJ

Solicitation Title: Professional Design Services for the Central Energy Plant Chiller

System

Addendum Date: July 2, 2024

Procurement Contact: Dave Janney, Procurement Agent III

RFQ 24-R084454DJ is amended as set forth herein. Responses to questions posed by prospective bidders are provided below. This Addendum is hereby incorporated in and made a part of RFQ 24-R084454DJ.

The deadline to submit all inquiries concerning interpretation, clarification or additional information pertaining to this RFQ was June 7, 2024.

ADD:

SECTION E, EXHIBITS

Exhibit 3, Central Energy Plant - Plans, are hereby incorporated into the RFQ and available for download as a separate attachment.

ADD:

SECTION E, EXHIBITS

The attached Exhibit 4, Central Energy Plant Reports, are hereby incorporated into the RFQ.

QUESTIONS AND RESPONSES:

- Q1. Are drawings of the existing system available? Confirm backgrounds (CAD and/or Revit) will be provided in order to create the drawings.
- R1. See Add Section above.

- Q2. Are there any trend logs for the chiller plant performance? If so, would these be available now or during the design?
- R2. See Add Section above.
- Q3. Can you provide the available cut sheet and any existing drawings for the chiller plant?
- R3. See Add Section above.
- Q4. Other than the control schematic, is there existing documentation and sequence of operation for the existing chiller plant? If yes, will this document be available during the design period?
- R4. This will be available during the design period.
- Q5. Are "as built" plans and specs for existing system available?
- R5. See Add Section above.
- Q6. Do you have a list of existing components and their respective serial numbers available?
- R6. Central Energy Plant York Unit Model YKECETQ7-EPGS Compressor Model, YDHF-52VDD, S/N SNBM-120900

York Unit Model YKECETQ7-EPGS Compressor Model, YDHF-52VDD, S/N SNBM-120710

- Q7. Are maintenance logs available?
- R7. See Add Section above.

NOTE:

Deleted items will be struck through, added or modified items will be <u>underlined</u>. All other terms and conditions remain as stated in the RFQ.

INSTRUCTIONS:

Receipt of this Addendum must be acknowledged as instructed in the solicitation document. Failure to acknowledge receipt of this Addendum may result in the response being deemed non-responsive.

END OF ADDENDUM

AUTHORIZED FOR RELEASE



1610 Orange Avenue, St. Cloud, FL 34769 407-957-2225 fax: 407-957-0643

WATER-ANALYSIS & SERVICE REPORT	Chemicals in Use:
WILLIAM DERVICE REPORT	= CWT-153 CWB-5HS
Customer: MANATEE COUNTY - CENTRAL ENERGY PLANT 323 9 TH ST W	BusAN/078 CWT-20
Contractor: CONTACT: DOUG 941 737-3156	
Attention: Date:	Chemicals Added and/or Delivered:
Reported in PPM RECOMMENDED LIMITS	CWT 153(Gals)
CT CHW FROM TO FROM TO	CWT 163(Gals)
Phenolphthalein P 40	CWT-1646 (Gals)
Total Alkalinity M 140 400	CWT-20 2 (Gals)
Chloride NaCl Z60 200	CWT-100 (Lbs)
Total Hardness TH 460 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
Hydrogen PH 8.6 /0.0 8.3 /0.1	CWB-SHS (Gals)
Conductivity MM 15631701 $\approx 16001000 4000$	BUSAN 1735 (Gals)
Sequest/Polymer Seq (4) - 5 10	BUSAN 1078(Gals)
Iron FE 8 8 4 1.0 4 1.0	DIALD 45 (Gals)
Silica SiO 2	
Nitrite NaNO ₂ 360 600 1000	,
Sulfite SO ₃	CLT-MSC(Lbs)
Phosphate PO ₄	CWCL-100(Gals)
Bromine NaBr	OTHER
Copper Cu S < .5	Water Meter Reading:
Chlorine - Free CI ₂	
Clorine - Total CI2	
Make-up P M NaCl TH FE MM COCs - NaCl	COC. THE COC. NO.
Water Analysis 80 160 280 8 964 —	COCs - TH COCs - MM
Customer's Signature & Date: How MOODEN OS 15/24 KCT - CHEMICAL THERITOR IT SUIGHTLY LOW. M. TO CHEMICAL PUMP. ALL OTHER NUMRERS WITHIN ALL OTHER NUMRERS WITHIN ALL OTHER TOST WITHIN LENGT. CHEMICAL FEEDLE. AN OTHER TEST WITHIN LENGT.	Recommensed Limbs.
Customer's Signature & Date: NON 1 100 100 100 KCC Service Rep's Si	gnature & Date:
	P



WATE	Chemic	als in Use:									
		CWT-153	CWB-SHS								
Customer:	MANATEE COUNTY – CENT 323 9 TH ST W	RAL ENERGY	PLANT	BusAN1048	Cu1-20						
Location:	BRADENTON, FL 34205	BRADENTON, FL 34205									
Contractor:	BRADENTON , FL 34205 CONTACT: DOUG 941 737-3156										
Attention:		Chemicals Added a	nd/or Delivered:								
Attention.			(Gals)								
Reported in PPM	CT CHW /	FROM TO	FROM TO	CWT 163							
Phenolphthalein P			i i	CWT-1646							
Total Alkalinity M		< 400			(Gals)						
Chloride NaCl	260	< 300									
Total Hardness TH	780	< 500		CWT-100							
Hydrogen PH	8,9 10.1		8,3 10.1	CWB-SHS	(Gals)						
Conductivity MM	1656 16+0	> 1600	1000 4000	BUSAN 1735 _	(Gals)						
Sequest/Polymer Seq		6 12		BUSAN 1078 _	(Gals)						
Iron FE	8 TR	< 1.0	2 1.0	DIALD 45	(Gals)						
Silica SiO 2		1 1		BIOBROM BT							
Nitrite NaNO ₂	(280)		600 100								
Sulfite SO ₃			ì	CLT-MSC							
Phosphate PO ₄				CWCL-100	(Gals)						
Bromine NaBr				OTHER							
Copper Cu	0	12 .5		Water Meter Readi	ng:						
Chlorine - Free CI ₂											
Clorine-Total CI2											
Make-up P	M NaCl TH	FE MM	COCs - NaCl	COCs - TH	COCs - MM						
Water Analysis	160 140 320 B	941									
* 15-1	HEMICAL FAMILIAITOR	15 /10	2.22	1 - 1							
1+1EMICOL	Pump, All OTHER	harmalas	INTHINE A	come 1A	100						
	The second second	1001111000	Chilling Rec	Compense	<u> </u>						
* 1HW-	NITRITE 15 Low.	ADJES 2	5 cals of	= Cut-20	76						
CHEMILON	Freda. All OTHER	TOST WIT	HNY ROSSIMM	as Level	٩						
***************************************				- 	-						
		4									
Customer's Signatu	re & Date:	KC	C Service Rep's Signat	rure & Date:							
The second secon	The state of the s			1/							



Kibler Chemical Corporation, Inc. 1610 Orange Avenue, St. Cloud, FL 34769

407-957-2225 fax: 407-957-0643

www.kiblerchemical.com

Chemicals in Use:

WATE	R-ANALYSIS & SERVICE REPORT	Chemicals in Use:
Customer:	BRADENTON, FL 34205 CONTACT: DOUG 941 737-3156	BUSAN1078 CWT-20
Contractor.		Chemicals Added and/or Delivered:
Attention:	Date: 3//4/24	CWT 153 (Gals)
Reported in PPM	RECOMMENDED LIMITS	
Phenolphthalein P	CT CHW FROM TO FROM TO	CWT 163 (Gals)
Total Alkalinity M	70	CWT-1646 (Gals)
Chloride NaCl	300 2 900	CWT-20 CGals)
Total Hardness TH	480 2 500	CWT-100 (Lbs)
Hydrogen PH	9,2 9,9 8,3 10.1	CWB-SHS 7 (Gals)
Conductivity MM	1572/686 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	BUSAN 1735 (Gals)
Sequest/Polymer Seq	(4) = 12	BUSAN 1078 (Gals)
Iron FE	8 (2) 2 1.0 < 1.0	DIALD 45 (Gals)
Silica SiO 2		BIOBROM BT (Lbs)
Nitrite NaNO ₂	(360) 600 1000	CLT-MSC (Lbs)
Sulfite SO ₃ Phosphate PO ₄		
Bromine NaBr		CWCL-100(Gals)
Copper Cu	8 2 3	OTHER
Chlorine - Free CI ₂		Water Meter Reading:
Clorine - Total CI2		
Make-up P Water	M NaCI TH FE MM COCS-NaCI	COCs - TH COCs - MM
Analysis	80 140 360 0 906 -	
LIMITS, CI	VITRITE IS SLIBHTLY LOW, MADE ADJU PUMP. AU DTHER NUMBERS WITHIN RE DEMICAL PUMP FOR (MICON 1078) NOT WORKING Replaced TRON IS HILH, NITRIJE IS LOW, ALLO D CHEMICAL FECSION.	propracy , Niers
Customer's Signatus	re & Date: KCC Service Rep's Signa	ature & Date:



WATER-ANALYSIS & SERVICE REPORT

Kibler Chemical Corporation, Inc.

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Chemicals in Use:

							CWT-153	CWB-KHS
	ANATEE COU	NTY - CENTRA	AL ENE	RGY PL	ANT		1JUSAN 1678	CWT-20
Location: P	23 9 TH ST W RADENTON . F	L 34205				L)		_
Contractor: Co	ONTACT: DOUG	941 737-3156						4
Attention: Date: 2/9/24								and/or Delivered:
Reported in PPM	CT CHIA		FROM	TO	DED LIM	TO	CWT 153	
Phenolphthalein P	CT CHW		FROM	70	FROM	10		(Gals)
Total Alkalinity M	120		<	400				(Gals)
Chloride NaCl	350		~	900			CWT-100	
Total Hardness TH	440		<	500				
Hydrogen PH	8.4 10.0			_	8.3	10.1	CWB-SHS	(Gals)
Conductivity MM	1564 1545		×	1600		4000	BUSAN 1735_	(Gals)
Sequest/Polymer Seq	(9) =		6	12	_		BUSAN 1078	(Gals)
Iron FE	0 (1.0)		<	1.0	<	1.0	DIALD 45	(Gals)
Silica SiO 2			İ	ĺ	_	_	BIOBROM BI	
Nitrite NaNO ₂	(0)				600	1000		
Sulfite SO ₃					1	1	CLT-MSC _	
Phosphate PO4		\					CWCL-100 _	(Gals)
Bromine NaBr			V				OTHER	
Copper Cu	8		<	,5			Water Meter Read	ling:
Chlorine - Free CI ₂			1	- 1				
Clorine - Total CI2			1			1		
Make-up P Water	M NaC	TH F	E N	/IM	COCs - N	iaCl	COCs - TH	COCs - MM
Analysis D	180 201	320 E	10	74				
X (T- (4)	EMICAL IN	HIBIDR 1	(10	2. M	IADE	ADJUST A	ments to	CHIEMON
- Fungo. All	OTHER NUMB	FRE WITHIN	Kelom	measu	e 111	myz,		
* CAW-I		CH. (HEMICO	n In	+119170	r Lo	v, Ada	ded 12,5/0	5 OF
- CML-100 I	V (HEMICOL	rear,						
:								
Customer's Signature	e & Date: John	Syavan	el	KC	C Service F	Rep's Signat	ture & Date:	/2
		And No.					#	



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WATER-ANALYSIS & SERVICE REPORT	FEED & BLEED EQUIPMENT INSPECTION REPORT UP=working DN= out of service
Customer: MANATEE COUNTY – CENTRAL ENERGY PLANT	UR = under repair
323 9 TH ST W Location: BRADENTON, FL 34205	Current Equipment UP DN UR
Contractor CONTACT: DOUG 941 737-3156	Conductivity Controller
	Feed & Bleed Controller
Attention: Date:	System Flow Switch
SAMPLE SOURCE: UNIT NAME & NUMBER RECOMMENDED LIMITS	Bleed Valve
Reported in PPM (HILLE SC	Water Meter Inhibitor Timer
CT CHW FROM TO FROM TO	
Phenolphthalein P ZO	Inhibitor Pump
Total Alkalinity M 100	Algaecide Pumps
Chloride NaCl Z(D) < 900	
Total Hardness TH 109,360 < 500	Treatment Chemicals In Use:
Hydrogen PH 8.9 (0.4) — — 9.3 10.	1 Bushwill 78, Cur-20
Conductivity MM 1985 1455 \\ \times 1600 1000 40	134CAN/077, Cut-20
Sequest/Polymer Seq. 3 - 12 -	Treatment Chemicals Added And Or
Iron FE 0 0,5 < 1.0 < 1.	
Molybdenum Mo	Delivered: 10 gal 153 12.5/bs cwr-100
Nitrite NaNO ₂ (290)	72
Sulfite SO ₃	7)
Phosphate PO ₄	Water Meter Reading:
Bromine NaBr	
Copper Cu S	
Make-up P M NaCl TH FE MM COCs - NaCl Water	COCs - TH COCs - MM
Analysis 80 200 380 8 1995	
# CT - CHIEMICOL INHIMITUR IS COW, MADE ADJUST	was To HEMILAL ALLE
ALL OTHER NUMBERS WITHIN KECOMMES INNTES	
& CHW- PH IS HIGH, CHEMICAL INTIMAK IS CO	J. Added 12.5165
of eur-100 to CHÉMICAL Perlip.	
Customer's Signature & Date: KCC Service Rep's Si	gnature & Date:



WATE	R-ANALYSIS & SER	FEED & BLEED EQUIPMENT INSPECTION REPORT					
		UP= working DN	= out of		e		
Customer:	MANATEE COUNTY - CENTR	AL ENERGY P	PLANT	UR = under	repair		
Location:	323 9 TH ST W	Current Equipment	UP	DN	UR		
Contractor:	BRADENTON, FL 34205 CONTACT: DOUG 941 737-3156	Conductivity Controller					
			1-1-	Feed & Bleed Controller			
		Date: RECOMMEND	/ /	System Flow Switch			_
SAMPLE SOURC	E: UNIT NAME & NUMBER	Bleed Valve Water Meter					
Reported in PPM		Tower	CHILLROLUST	Inhibitor Timer			
	CT CHW	FROM TO	FROM TO	Algaecide Timer		-	
Phenolphthalein P	40 1		1 1	Inhibitor Pump			_
Total Alkalinity M	120	< 400		Algaecide Pumps			
Chloride NaCl	400	L 900		T	Y Y1		
Total Hardness TH	360	< 500		Treatment Chemicals			
Hydrogen PH	8,9 9,7		8.3 10.1	[wr-153, CWB]	-3 H C	-	
Conductivity MM	1458 1899	≥ 1600	1000 4000	1/4 (AN) 1078;	CWS	20	
Sequest/Polymer Seq.	(3) -	6 12		Treatment Chemicals	Added	And (Or
Iron FE	A 05	2 1.0	< i,0	Delivered: 2.55	0		
Molybdenum Mo		1 1			1 / 4		
Nitrite NaNO ₂	690		600 1000				
Sulfite SO ₃	1 1.000		1 1				
Phosphate PO ₄				Water Meter Reading	:		
Bromine NaBr							_
Copper Cu	X	2 5					-
	2	ا دره ا					
Make-up P Water	M NaCl TH FE	MM	COCs - NaCl	COCs - TH	COCs -	- MM	
Analysis	80 260 260 8	1098					
							_
*CT-CH	EMIRE INMIBITOR U	MADE	E ADTUSTM	ents 70 CH	EMICE	n	
Pump. All		NITHIN RO	commende	& limits.			
W (1) 1	W 1		1 1	, ,			
* CtiW-F	IL MUMBERS WITH	N REcom	ment c	evels.			
							-
9							
	*						
		٨			_		
Customer's Signature	& Date: Holm Stalin	nounca	Camping Day's Gi				
Customer's signature	a Date.	WIND TWOCK	Service Rep's Signati	ure & Date:			_



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WATE	R-ANALYSIS & SEI	FEED & BLEED : INSPECTION UP= working DN		Г	
Customer:	MANATEE COUNTY - CENT	RAL ENERGY PLANT	UR = under		
Location:	323 9 [™] ST W BRADENTON, FL 34205 CONTACT: DOLIG 941 737-3156		Current Equipment	UP DN U	JR
Company of the second	BRADENTON, FL 34205	Conductivity Controller			
Contractor	OCMIAO1: DOGG 541 757-5150		Feed & Bleed Controller		
Attention:		Date:/1/9/23	System Flow Switch		
SAMPLE SOURCE	E: UNIT NAME & NUMBER	RECOMMENDED LIMITS	Bleed Valve		
		1.00 1.00	Water Meter		
Reported in PPM	CT CHW/	FROM TO FROM TO	Inhibitor Timer		
Phenolphthalein P	60	1 1	Algaecide Timer		_
Total Alkalinity M	100	< 900	Inhibitor Pump Algaecide Pumps		-
Chloride NaCl	400	< 900			_
Total Hardness TH	380	2 5w	Treatment Chemicals		
Hydrogen PH	9.0 10.1	- 8,3 /0,1	BUSAN 1078 CW	B-545	_
Conductivity MM	1598 1496	~ 1600 1001 Your	BUSHN 1078, C	W7-70	_
Sequest/Polymer Seq.	4 -	6 12 -	Treatment Chemicals	Added And Or	
Iron FE	6 0,5	2 1.0 2 1.0			
Molybdenum Mo	7 -		Delivered: 7.5 CWT-100 17.5/13		_
Nitrite NaNO2	(300)	600 1000		-	_
Sulfite SO ₃		i i i			_
Phosphate PO ₄			Water Meter Reading	:	
Bromine NaBr					e .
Copper Cu	Ø	2 3	-		
Make-up p	M NaCl TH F	E MM COCs - NaCl	COCs - TH	000 101	=
Water		8 1067	COCS-TH	COCs - MM	-
Analysis	190 260 260 8	7067			
# CT - C+	EMICA INHIBITOR 1.	PRIMED PAR READ	theres Fock	1 EMICAL	-
* CHW- Pot Feede	CHEMICAL ENHIBITOR	11 /ow. Added	WF-100 70	CHEMILA	-
					-
· ·					72
					2
				0	
Customer's Signature	& Date: John & How	KCC Service Rep's Signa	ture & Date:	2	_,



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WATER-ANALYSIS & SER	FEED & BLEED INSPECTION	_		NT						
Customer MANATEE COUNTY - CENTRAL E		V= out of		æ						
323 9 TH ST W			Current Equipment	UP	DN	UR				
Location: BRADENTON, FL 34205	Conductivity Controller									
Contracto CONTACT: DOUG 941 737-3156	Feed & Bleed Controller									
Attention:	Date:	110/23	System Flow Switch							
SAMPLE SOURCE: UNIT NAME & NUMBER	RECOMMENT	7.57	Bleed Valve							
Brain Ba booker.			Water Meter							
Reported in PPM	FROM TO	FROM TO	Inhibitor Timer							
Phenolphthalein P UD	PROM TO	1 :	Algaecide Timer							
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Inhibitor Pump							
Total Alkalinity M /70	~ 400		Algaecide Pumps							
Chloride NaCl 550	< 300		Treatment Chemicals	In Üse	:					
Total Hardness TH 900	< 500	1								
Hydrogen PH 8 9 10 D		8.3 10.1	Bust 1078	(iv)	-2 b					
Conductivity MM 1774) 1759	1600	1000 4000	20300 707 19							
Sequest/Polymer Seq.	6 12	_ =	Treatment Chemicals	Added	And	Or				
Iron FE O TR	2 1.0	4 1.0	Delivered: 2.5	15	H5.					
Molybdenum Mo / -	ì :		Delivered: 2.5 g	0	•					
Nîtrite NaNO ₂		600 1000								
Sulfite SO ₃		1 (
Phosphate PO ₄			Water Meter Reading	g:						
Bromine NaBr										
Copper Cu S						_				
Copper Cu D	4 .5	5 1								
Make-up P M NaCl TH FE	MM	COCs - NaCl	COCs - TH	COCs	- MM					
Water Analysis P 80 260 260 Ø	1024									
			+							
* CT- CHEMICAL INHIBITOR SU	ILMITE LOS	NMADE	ADJUST MUTO	7	?					
CHEMICA PUMP - CONDUCTIVITY	SLIGHTLY	AIGH, A	1 CHEMICAE	PU	mo)5				
Pained and Reasy.										
* (+1W - CHÉMICA INTILODA	Low. Add	red 2514	7 W 70 20	-10	<u>) </u>	_				
TO HEMILOZ FORD TANK.										
						_				
				-		_				
						_				
				/_	_					
Customer's Signature & Date:	May Hacc	Service Rep's Signat	ure & Date:	_						



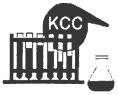
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WATER-ANALYSIS & SERVICE REPORT						FEED & BLEED EQUIPMENT INSPECTION REPORT						
Customer: _ 32	ANATE	E COUI	NTY – C	ENTRA	L ENEF	RGY PL	ANT		4	N= out o	of servi	ce
Location Bl	RADEN	TON F	L 3420)5					Current Equipment	UP	DN	UR
Contractor:	ONTACT	DOUG	941 737	-3156					Conductivity Controller			
							,		Feed & Bleed Controller			
Attention:					Da	ite: 9/	12/2	3	System Flow Switch			
SAMPLE SOURCE	E: UNIT	NAME	& NUM	BER	RECO	MMEN	DED LIN	MITS	Bleed Valve			
Reported in PPM				1 /	Tim	ser	111111	(A) 1 /a 14	Water Meter			
Acported in 1111	CT	CHIW			FROM	TO	FROM	ED LOUP	Inhibitor Timer			
Phenolphthalein P	20	1					1	1	Algaecide Timer			}
Total Alkalinity M	100		1		2	(4.0)			Inhibitor Pump			
Chloride NaCl	200					400	-	\vdash	Algaecide Pumps			
Total Hardness TH		-	1	-		300		-	Treatment Chemicals	In Use	:	
Hydrogen PH	290	7.0		-		500			CWT-113, CWI	7-CH	(
Conductivity MM	815	10.1		1			8.3	10.1	Busmu 1078 (0	1- 7	26.	
Sequest/Polymer Seq.	1439	1232			∞,	1600	1000	4000	, , , , , ,			
Iron FE	(3)	سر ش		1	6	12			Treatment Chemicals			Or
Molybdenum Mo	0	0.5			_	1.0	_	1.6	Delivered: 17.	al 1	53,	
Nitrite NaNO7	1	7		1	1	1			Z. Sgul SHS	2.	5	0
		200					600	1000	CWT-20		-	
Sulfite SO ₃							ĵ	i	TX7 1 N.E. 1 N.E. 11	_		
Phosphate PO ₄									Water Meter Reading	.=		
Bromine NaBr	1					1						
Copper Cu	10					,5) =			-
34.3				<u> </u>								
Make-up Water	M	NaCl	TH	-			COCs - Na	aCI	COCs - TH	COCs -	MM	
Analysis	80	120	241	0/6	87	19						
ALC CHEMI	MICA	L IN	+1181	TAR L	0U. 1	MADE	ADTU	st men	AS TO CHEMIC	oc	pua	<u>ф</u> .
							/					
* CHW-C+	EMIC	AL I	NIIIC	7177VZ	Low	AJ.	led	255	el OF CUT-	7.0		
-/ & (HEMILO)	Fe	60.	12	Bur	Tr	MANGI	or 1	evel	. ALC UTTH	ER 1	NIG	un3
WITHIN R	ecom	ma	2 /	int.								_ [
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		()	1	1	-/	7		_				
Customer's Signature &	& Date:	1	0	7	1410	KCC	Service Re	n's Sianas	re & Date:			
		3	1	· · ·	, , , ,		our rice step	חומווצים כי	ie de Date.			_



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WATER-ANALYSIS & SERVICE REPORT	FEED & BLEED EQUIPMENT INSPECTION REPORT
Customer 323 9 TH ST W	UP= working DN= out of service UR = under repair
Location: BRADENTON, FL 34205	Current Equipment UP DN UR
CONTACT: DOUG 941 737-3156	Conductivity Controller
Contracto	Feed & Bleed Controller
Attention: Date: <u>8/15/2.3</u>	System Flow Switch
SAMPLE SOURCE: UNIT NAME & NUMBER RECOMMENDED LIMITS	Bleed Valve
Reported in PPM	Water Meter
Reported in PPM CT CHW FROM TO FROM TO	Inhibitor Timer
Phenolphthalein P // 7 /	Algaecide Timer
90/	Inhibitor Pump
770	Algaecide Pumps
270	Treatment Chemicals In Use:
7 70 / 2 3 00	CWT-157 174(AN 1078.
0.3 /0.4	CWB-CHS
7677 7267 2 7600 7000 9000	
Sequest/Polymer Seq. 9 5 12 -	Treatment Chemicals Added And Or
Iron FE 8 TR 2 1.0 2 1.0	Delivered: 5/1/157
Molybdenum Mo (
Nitrite NaNO ₂ S 600 1000	
Sulfite SO ₃	Water Motor Ponding
Phosphate PO ₄	Water Meter Reading:
Bromine NaBr	
Copper Cu C .5	
Make-up P M NaCl TH FE MM COCs - NaCl Water	COCs - TH COCs - MM
Analysis 8 100 120 226 8 889	
* CT- CHEMICAL TWHIRING LOW. MADE ADJUST TWMINGTON LONGE, ALL OTHER NUMBERS WITHIN A ALL CHEMICAL INHIBIOR LOW, WILL RETURN (WT-20. ALL OTHER NUMBERS WITHIN RECONNER	Ta. A00 -
Customer's Signature & Date: KCC Service Rep's Signa	ture & Date:



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FEED & BLEED EQUIPMENT WATER-ANALYSIS & SERVICE REPORT INSPECTION REPORT UP= working DN= out of service MANATEE COUNTY - CENTRAL ENERGY PLANT UR = under repair Customer: 323 9TH ST W Current Equipment UR Location: ____ BRADENTON, FL 34205 Conductivity Controller CONTACT: DOUG 941 737-3156 Contractor: Feed & Bleed Controller _ Date: _ 7/18 Attention: System Flow Switch Bleed Valve RECOMMENDED LIMITS SAMPLE SOURCE: UNIT NAME & NUMBER Water Meter TOWER 1-11XP Reported in PPM Inhibitor Timer FROM CHW Algaecide Timer Phenolphthalein Inhibitor Pump Total Alkalinity M 400 Algaecide Pumps Chloride 300 Treatment Chemicals In Use: Total Hardness TH 500 CWT-153, WT7-167 Hydrogen PH Conductivity MM 238 1600 1000 4050 Sequest/Polymer Seq. Treatment Chemicals Added And Or Iron Delivered: Molybdenum Mo Nitrite NaNO₂ 600 1000 Sulfite SO₃ Water Meter Reading: Phosphate PO₄ NaBr Bromine Copper Make-up NaCl COCs - NaCl COCs - TH COCs - MM TH Water Analysis (HEMICAL INHIRITOR SLIGHTLY LOW MADE ANTHOMENTS SLIBHTY MICH, CHEMING INHIONIR Customer's Signature & Date: KCC Service Rep's Signature & Date:_



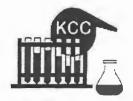
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WATER-ANALYSIS & SERVICE REPORT		REPORT V= out of service
Customer: MANATEE COUNTY – CENTRAL ENERGY PLANT 323 9 TH ST W	UR = under	r repair
Location: BRADENTON, FL 34205	Current Equipment	UP DN UR
CONTACT: DOUG 941 737-3156	Conductivity Controller	
	Fced & Bleed Controller	
Attention: Date: $\frac{(z/23)}{z}$	System Flow Switch	
SAMPLE SOURCE: UNIT NAME & NUMBER RECOMMENDED LIMITS	Bleed Valve	
Reported in PPM JOWER CHILLEDLAS	Water Meter Inhibitor Timer	
Reported in TTM CT CHW - FROM TO FROM TO	Algaecide Timer	
Phenolphthalein P 40	Inhibitor Pump	
Total Alkalinity M 100 2 400	Algaccide Pumps	
Chloride NaCl Zw 2 3w		
Total Hardness TH 960 < 500	Treatment Chemicals	
Hydrogen PH 8.5 10.3 - 8.3 1c.1	Ew1 155, WT.	7-167
Conductivity MM 1465 1214 ≈ 1600 1000 4000	Cut 153, WT. (T-70 (W) RUSAN 1174	3-5HS,
Sequest/Polymer Seq. 4 — 6 /2 —	Treatment Chemicals	
Iron FE 9 0.5 2 1.0 2 1.0	Delivered: Syst	
Molybdenum Mo	102, 7. Sax	
Nitrite NaNO2	102 6.39	<u> </u>
Sulfite SO ₃ i		
Phosphate PO ₄	Water Meter Reading	g:
Bromine NaBr		
Copper Cu /5		
copper cu / 1 / 2 .5		
Make-up P M NaCl TH FE MM COCs - NaCl	COCs - TH	COCs - MM
Water Analysis 8 80 120 260 8 8 9 5		
* CT-CHEMIAL THURSTON SLIGHTLY CAW, MADE A	Which I	(MER HON
First ALL CHEMICAL PUMPS PRIME AND READY		
* CHW- (HEMICAL INHIRTOR LOW. ADDED 2: Squ	los cut-2	o, pic
THER NUMBERS WITHIR, ROLLING Jenle		
Y A A-		7
Customer's Signature & Dater KCC Service Rep's Signat	ure & Date:	2



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WATER-ANALYSIS & SERVICE REPORT Customer: MANATEE COUNTY - CENTRAL ENERGY PLANT						FEED & BLEED INSPECTION UP= working DN UR = under	REP	ORT				
201	െ പ്ര	ም ኒልያ		41KAL	ENEK	GY PLA	N I	***************************************	Current Equipment	UP	DN	UR
Location: BR	ADENT	ON, FL	34205					é-ouspapage-	Conductivity Controller	***************************************		R.J. 35%.
Contractor: CO	NTACT:	DOUG 9	41 737-31	156					Feed & Bleed Controller		***********	Batotocotacadah
Attention:		erre Managara.			Da	te: 5.	1/6/23	•	System Flow Switch		-	
SAMPLE SOURCE			e nimiri	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		7	DED LIN		Bleed Valve		N-Nieineninini	
	T ULTER	7.1771377.		233	NYN No American	***************************************	\$*************************************	winderpolitics	Water Meter			
Reported in PPM	سير مرا	CHW	Total State of the	-	FROM	TO	FROM	\$ € 555° TO	Inhibitor Timer			
Phenolphthalein P		LMV			FRUM	! IV	FROM	10	Algaecide Timur			
	142			Vyveinoveinovenosonoso	**************************************	· · · · · · · · · · · · · · · · · · ·			Inhibitor Pump	1		*********
Total Alkalinity M	140	ļ	1			400			Algaecide Pumps		······································	
Chloride NaCl	1200	MIN MALIANA AND AND AND AND AND AND AND AND AND	¥	**************************************		300	19111111111111111111111111111111111111		Treatment Chemicals	In Rive	1.A.	AND ASSESSMENT OF THE PARTY OF
Total Hardness TH	1460	in the state of th	1,4		4	500	Altra	The state of the s	LIT-13 WIT-1			م الما
Hydrogen PH	4	10.3		77777	· Carrieron		8.3	/a.	1. 1549 1579	- d - d - d d d d d de maran		-0-1000148414.
Conductivity MM	1/400	1234			~	1/4/00	/ 400	4630				dest i dest bleek en
Sequest/Polymer Seq.	Y 7/7	**************************************		\	1	1/2	ментикальна	all representations.	Treatment Chemicals	Added	And	Or
Iron FE		Ð.5	***************************************			7.0		1.0	Delivered: 5500			
Molybdenum Mo	1	- Frining and a second				1	- Carrier		2 SA/11		7	
Nitrite NaNO ₂		6/11)		***************************************		1	A FI	7800	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		200000000000000000000000000000000000000	mercerete .
Sulfite SO,	- Annual Control	1444			1			i			haaaaaaaaaaaaa	40020000000000
Phosphate PO4			WAS ARREST LA.	, , , , , , , , , , , , , , , , , , ,	***************************************	<u> </u>	Hamphanakanakan dada dada	* ************************************	Water Meter Reading	\$		
Bromine NaBr	Through the state of the state		1	- Contract			<u> </u>	***************************************		*************	***********	
Copper Cu			3			15	i i i i i i i i i i i i i i i i i i i			ireneineeelesesissaan		
	47					1	<u> </u>			VIII. (1848) (1848)	MMM or or or or or	
Maks-up p W≝ter	М	NaCl	White distribution and the second	FI		am .	COCs - N	(aCl	COCs - TH	cocs	- MM	
Analysis Z	120	80	200			A Agreement	mmmaaaainii vi 25.9+q+ +q+		The state of the s		······	
J. iv- A.	EMICO Parameter	72		1115	1/64/ 82/4	-1/4		MANS PROPERTY.				
Customer's Signature	& Date:	4-2-222-222-272-272-272-2			memori, m.m. 2 221-2-1-2	KCC	Service R	ep's Signa	ture & Date:		A. A	



WATER-ANALYSIS & SERVICE REPORT MANATEE COUNTY - CENTRAL ENERGY PLANT	FEED & BLEED EQUIPMENT INSPECTION REPORT UP= working DN= out of service UR = under repair			
Customer: _ 323 9 TH ST W	Current Equipment UP DN UR Conductivity Controller			
Attention: Date: 4/18/23	Feed & Bleed Controller System Flow Switch			
SAMPLE SOURCE: UNIT NAME & NUMBER RECOMMENDED LIMITS	Bleed Valve			
Reported in PPM CT CHW - TOWER LOVE FROM TO FROM TO	Water Meter Inhibitor Timer			
Phenolphthalein P 75 /	Algaecide Timer			
Total Alkalinity M 100	Inhibitor Pump Algaccide Pumps			
Chloride NaCl /60 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				
Total Hardness TH 320 = 500	Treatment Chemicals In Use:			
Hydrogen PH 9.1 10.1 - 8.3 10.1	- CWT-153 CWB-SHS,			
Conductivity MM 1804 1247 \= 1600 1600 4600	Busan 1078 (UT-70			
Sequest/Polymer Seq. 3 6 12 -	Treatment Chemicals Added And Or			
Iron FE 9 8 2 1.0 2 1.0	Delivered: 154 153.			
Molybdenum Mo	5 ml 162 5 ml (J-20)			
Nitrite NaNO2 6 1050				
Sulfite SO ₃	W. A. W. D. F.			
Phosphate PO ₄	Water Meter Reading:			
Bromine NaBr / (
Copper Cu D / 2 .5 / /				
Make-up P M NaCl TH FE MM COCs-NaCl Water Analysis 0/100 12 N 240 886	COCs - TH COCs - MM			
F CHW- CHEMICA INMITTER LOW. MADE ASSISTING PUMP. ALL CHEMICAL PUMPS PRIM And READY F CHW- CHEMICAL INMITTER LOW. Added 590				
TOTAL TARMINA INFINITE (SW. 118622 Uga	<i>OF Coll -10.</i>			
Customer's Signature & Date: Alex Rep's Sign	nature & Date:			



Customer: _ 323 9 TH ST W WR = under repair	WATE	WATER-ANALYSIS & SERVICE REPORT MANATEE COUNTY CENTRAL ENERGY DI ANTE										
Location: BRADENTON, FL 34205 CONTACT: DOUG 941 737-3156 Contractor: Date: 3/14/23 SAMPLE SOURCE: UNIT NAME & NUMBER RECOMMENDED LIMITS Reported in PPM Reported in PPM Total Alakalinty M 220 Location: PH 9/3 102 Conductivity Controller Reported in PPM Total Hardness TH 4/40 Hydrogen PH 9/3 102 Conductivity MM 1521 1221 Conductivity	Customer: _ 3	ANATEE C	OUNTY - C	ENTRA	L ENER	RGY PL	ANT	_				
Attention: SAMPLE SOURCE: UNIT NAME & NUMBER RECOMMENDED LIMITS Reported in PPM CT CHW - FROM TO FROM TO Algaecide Timer Inhibitor Timer Algaecide Timer Inhibitor Pump Algaecide Pumps Algaecide Pumps Treatment Chemicals In Use: Conductivity MM 1521 1221 Conductivity MM 1520 1221	Location: B	RADENTON	N,FL 3420	5					Current Equipment	UP	DN	UR
Attention: SAMPLE SOURCE: UNIT NAME & NUMBER RECOMMENDED LIMITS Reported in PPM CT CHW - FROM TO FROM TO Algaecide Timer Inhibitor Timer Algaecide Timer Inhibitor Pump Algaecide Pumps Algaecide Pumps Treatment Chemicals In Use: Conductivity MM 1521 1221 Conductivity MM 1520 1221		ONTACT: DO	DUG 941 737	-3156				_	Conductivity Controller			
SAMPLE SOURCE: UNIT NAME & NUMBER RECOMMENDED LIMITS Reported in PPM CT C C C C C C C C C C	Contractor:				-		÷	. —	Feed & Bleed Controller			
Reported in PPM CT C + W - FROM TO FROM TO Inhibitor Timer Algaecide Timer Inhibitor Timer Algaecide Timer Inhibitor Pump Algaecide Pumps A	Attention:				Da	te: <u> </u>	11412	3	System Flow Switch	<u> </u>		
Reported in PPM CT CHW — FROM TO FROM TO Agaecide Timer Algaecide Timer Algaecide Timer Algaecide Timer Inhibitor Pump Algaecide Timer Inhibitor Pump Algaecide Pumps Chloride NaCl 7/10 Coloride NaCl 7/10 Conductivity MM 15Cl 12Cl Conductivity MM 15Cl Conductivity MM 15Cl 12Cl Conductivity MM 15Cl 12Cl	SAMPLE SOURCE	E: UNIT NA	ME & NUME	BER	RECO	MMEN	DED LIN	ATTS	Bleed Valve			
Phenoiphthalein P 100 FROM TO FROM TO Algaecide Timer Algaecide Timer Inhibitor Pump Algaecide Pumps Algaecide		Т				4.0	1 100		Water Meter			
Phenoiphthalein P 1075 Total Alkalinity M 220 Chloride NaCl 2 16 2 2 3 3 2 2 3 3 3 4 4 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4	Reported in PPM	17 0	tild -	_			FROM	TO				
Total Alkalinity M 220 Chloride NaCl 2100 Chloride NaCl 2100 Ctal Hardness TH 440 Hydrogen PH 9, 3 10, 2 Conductivity MM 1521 1221 Sequest/Polymer Seq. 5 Molybdenum Mo Nitrite NaNO; Sulfite SO; Phosphate PO; Bromine NaBr Copper Cu D 120 D 790 Make-up Water Analysis P Na NaCl TH FE MM COCS-NaCl COCS-TH COCS-MM Make-up Water Analysis P Na NaCl The FE MM COCS-NaCl COCS-TH COCS-MM **CT - Chiefmical Tanhacitar Classific Pumps Primals Polymaps Polymaps Primals Polymaps Po	Phenolphthalein P	-	/	-			į	1				
Chloride NaCl 7 150	Total Alkalinity M					14.00		1	ļ			
Total Hardness TH 4/60			\rightarrow	Algaecide Pumps								
Hydrogen PH 9.3 10.2 — 8.3 1c.1 Conductivity MM 1521 1221	Total Hardness TH (A)											
Sequest/Polymer Seq. 5 - 6 /2 - Treatment Chemicals Added And Or Iron FE & & /2 1.0 /2 1.0 Delivered: 5 /2 1.3 /2 .5 /2 Cwt-20 Molybdenum Mo /	Total Hardness TH ////											
Sequest/Polymer Seq. 5 - 6 /2 - Treatment Chemicals Added And Or Iron FE & & /2 1.0 /2 1.0 Delivered: 5 /2 1.3 /2 .5 /2 Cwt-20 Molybdenum Mo /	Hydrogen PH 9.3 10.2 8.3 1c.1 Rusen 1078 (117-28											
Iron FE 8 8 2 1.0 2 1.0 Delivered: 54 153, 2.54 CWT-ZO Molybdenum Mo			.(1)		×		1000	400		,		
Molybdenum Mo Nitrite NaNO2 300 / 600 /600 Sulfite SO3 Phosphate PO4 Bromine NaBr Copper Cu S / 600 /600 Make-up Water Meter Reading: Make-up Water Analysis P M NaCl TH FE MM COCS-NaCl COCS-TH COCS-MM Analysis P SO 120 240 B 790 A CT - CHEMICAL INHIBITOR GIBHTCH LOW. MANE ANUSI ments To CHEMICAL Pumps PRIME AND READY.			_		6							
Nitrite NaNO2 300 / 600 /600 Sulfite SO3 Phosphate PO4 Bromine NaBr Copper Cu B		8 2	8	<u> </u>		1.0	1	1.0	Delivered: 55ml	153 g	2:50	
Sulfite SO3 Phosphate PO4 Bromine NaBr Copper Cu S		//-		ł,					CWT-20			
Phosphate PO4 Bromine NaBr Copper Cu B Make-up P M NaCl TH FE MM COCS-NaCl COCS-TH COCS-MM Water Analysis P 80 120 240 B 790 **The Color of the Make-up Cocs of the Cocs	Nitrite NaNO ₂	3	W	<u>``</u>		/	600	1000				
Bromine NaBr Copper Cu Make-up Water Analysis A CT - CHEMICAL INHIMITUR (LIBHARY LOW). MADE AN: USI ments To CHEMICAL Pumps. All CHEMICAL Pumps PRIME AND READY.	Sulfite SO ₃	/	<i>i</i>						Water Meter Deading			
Copper Cu & L 15 Make-up P M NaCl TH FE MM COCS-NaCl COCS-TH COCS-MM Water Analysis & 80 120 240 & 790 ** CT - CHEMICAL INHIGITIR GIBBITIAL LOW. MANE ANIMITY TO CHEMICAL Pumps PRIMILE AND REMPY.	Phosphate PO ₄	' '	}	,					water weier Reading	; •		
Make-up P M NaCl TH FE MM COCS-NaCl COCS-TH COCS-MM Water Analysis P 80 120 240 B 790 ** CT - CHEMICAL INHIAITER GIBBITUS LOW. MADE ADJUSTMENTS TO CHEMICAL PUMPS PRIMED AND REMAY.	Bromine NaBr				/)		/				_
Water Analysis & 80 120 240 & 790 ** CT - CHEMICAL INHIGITIR GILBERTY LOW. MADE AS:USI ments To CHEMICAL PUMPS PRIMED AND REMPY.	Copper Cu	B	,		1	:5	``					
Water Analysis & 80 120 240 & 790 ** CT - CHEMICAL INHIGITIR GILBERTY LOW. MADE AS:USI ments To CHEMICAL PUMPS PRIMED AND REMPY.	Makeun		N. CI			24						$\overline{}$
* CT-CHEMICAL INHIMITER GIBBLE LOW. MADE ASSISTMENTS TO CHEMICAL PUMPS PRIMED AND REMAY.	Water						COCs - N	aCl	COCs - TH	COCs	- MM	
Princes ALL ESTERICAL Pumps PRIALE AND BEDDY.	Analysis	180	20 29	0 2	7	10						
Customer's Signature & Date: KCC Service Rep's Signature & Date:												



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WATER-ANALYSIS & SERVICE REPORT FEED & BLEED EQUIPMENT INSPECTION REPORT UP= working DN= out of service											
Customer: — MANATEE COUNTY - CENTRA	AL ENE	RGY PI	_ANT	_	UP= working DI UR = unde			te			
Location: BRADENTON, FL 34205 CONTACT: DOUG 941 737-3156					Current Equipment	UP	DN	UR			
CONTACT: DOUG 941 737-3156				-	Conductivity Controller	<u> </u>					
as and	_			-	Feed & Bleed Controller	-					
Attention:	Da	te:	/8/	23	System Flow Switch	-					
SAMPLE SOURCE: UNIT NAME & NUMBER	RECO	MMEN	DED LIN	IITS	Bleed Valve Water Meter	-					
Reported in PPM	To	ier	100	VO	Inhibitor Timer						
CT CHW	FROM	то	FROM	то	Algaecide Timer			-			
Phenolphthalein P ZO					Inhibitor Pump	-					
Total Alkalinity M /4/0	Ž	400			Algaecide Pumps						
Chloride NaCl Zoo											
Total Hardness TH 4/0											
Hydrogen PH 9. () /().	-	_	8.3	16.1	CWT-153, Car						
Conductivity MM 1508 1251	5	1600	11000	4000	BUSAN 1078	LWT	-70	>			
Sequest/Polymer Seq.	6	12			Treatment Chemicals	Added	And	Or			
Iron FE 0.3 TR	1	1.0	1	1.0	Delivered:	,					
Molybdenum Mo /	-	_	_	_							
Nitrite NaNO ₂	1	/	600	1000							
Sulfite SO ₃	+		100	1000							
Phosphate PO ₄	1)				Water Meter Reading	;=					
Bromine NaBr	+/-		\rightarrow	\rightarrow							
Copper Cu 1	1	,5		1				_			
		1,5									
Make-up P M NaCl TH F	E N	1M	COCs - N	aCl	COCs - TH	COCs	- MM				
Analysis D 80 100 270 C	7 74	. 6									
ALC CHEMICAL PLANT PRIME PO	Made	Adda	57mat	3 70	(Hemal 1	my	0,				
ALL LHEMICAL PLANS PRIME AS	nd 1	2 es	r								
Mary and the second sec											
J-CHW- (HERICAL INHUMBER						Cul	-20				
To pot Fueder To south TA	HIPTOR	Les	el.					—			
								—.			
		.,						_			
0,11											
Customer's Signature & Date:	1	KCC	Service Re	ep's Signat	ure & Date:	_	_				



WATER	WATER-ANALYSIS & SERVICE REPORT										FEED & BLEED EQUIPMENT INSPECTION REPORT			
Customer: MA	NATEE	COUNT	Y – CEI	NTRAL	ENER	GY PLA	NT			V= out o	f service	:e		
Location: RR	ADENT	ON FI	34205						Current Equipment	UP	DN	UR		
Contractor: CO	NTACT:	DOUG 94	11 737-3	156					Conductivity Controller					
Contractor:									Feed & Bleed Controller					
Attention:					Da	te:	/15//	23	System Flow Switch					
SAMPLE SOURCE	E: UNIT	NAME &	NUMBI	ER	RECO	MMENI	DED LIM	nts	Bleed Valve					
ni nnić	E .	l T		,	Tan	121	loop		Water Meter	-				
Reported in PPM	CT	Chu			FROM	TO	FROM	TO	Inhibitor Timer	-				
Phenolphthalein P	20								Algaecide Timer	ļ				
Total Alkalinity M	160				6	400		<u> </u>	Inhibitor Pump	<u> </u>				
Chloride NaCl 200 (- 305														
Total Hardness TH	420				1	500			Treatment Chemical	In Use	2:			
Hydrogen PH	8.9	10.4			-		8.3	101	CWT 153					
Conductivity MM	1447	1290			~~	1600	1000	4000						
Sequest/Polymer Seq.	4	,,,,			6	12	1000	-	Treatment Chemical	, Aña	And I	Ω -		
Iron FE	8	20				1.0	,	1.0	39			Or		
Molybdenum Mo	1					10		1.0	Delivered: 5 gc 1	$\frac{1}{2}$				
Nitrite NaNO ₂	ZAL.	300				 	(, ,)	1000	2.39211 /6	_				
Sulfite SO ₃	Sex 1	700	<u> </u>		\	 	600	1000						
Phosphate PO ₄	1/				-			 	Water Meter Readin	g:				
Bromine NaBr	1						 \ 	 						
Copper Cu	0			<u>-</u>	6	,5		}						
Make-up p Water	M	NaCl	TH			1M	COCs - N	aCI	COCs - TH	COC	- MM			
Analysis 0	180	160	180		1/3	28								
CT-Cher Chemica	nic.)	inhi k	oiter Cheu	Slight miles	Hypu	α. 2 2ρ!5	prim	Shall ed a	adjustment	- 1 2	/			
		· ·		W			·							
CHL- Chi	Mica	1 101	ib;tox	100	, 0050	ible	1055	OF U	-uter unable	+0				
. 11 \	tmont	. 1	7his	4,74	, ,	CCOMA		Adding	1 / 1	00				
to trace	fuss,	ble	izak					ノ		1				
	i													
				•										
		$\overline{}$		70.14	/			- Walter and - Wal		7	00	/		
Customer's Signature	: & Date: _	1	<u> </u>	X40	<u> 15</u>	KC0	C Service R	Rep's Signa	ature & Date:		~~\tag{\tau}			



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WATER-ANALYSIS & SERVICE REPORT FEED & BLEED EQUIPMENT INSPECTION REPORT											
Customer: MANA	ATEE CO	DUNTY - CI	ENTRAL	ENER	GY PLA	NT		UP= working Di UR = unde	N= out o r repair	f servic	e
Location: BRAI	DENTON	.FL 34205	5					Current Equipment	UP	DN	UR
CONT	ACT: DO	ÚG 941 737-	3156					Conductivity Controller			
Contractor:						7		Feed & Bleed Controller			
Attention:				Da	te: <u>/</u>	2/14/	22	System Flow Switch			
SAMPLE SOURCE:	UNIT NA	ME & NUMI	BER	RECO	MMEN	DED LIM	nts	Bleed Valve			
				77	wer	ina	2	Water Meter			
Reported in PPM	T CH	ku		FROM	TO	FROM	то	Inhibitor Timer	-		
Phenolphthalein P	20	/						Algaecide Timer			
Total Alkalinity M 166											
100 Algaecide Pumps											
Treatment Chemicals In Use:											
Total Hardness TH 440 2 500 CINT 153 MUSSA 6078											
	9.		ļ	_		93	10.1	Cub sts C	651	20	
		52	-	\$\frac{1}{2}	1600	1000	9008				
	4	_		6	12			Treatment Chemical		And	Or
	8 1	Gr		6	1-0	4	1.0	Delivered: [Ugal			
Molybdenum Mo				Í	1			2.5, 108	15	Cus	70
Nitrite NaNO2	40	20			1	600	1000				
Sulfite SO ₃								W.A. M.A. D. H.	_	<u> </u>	
Phosphate PO ₄					-			Water Meter Reading	g:		
Bromine NaBr				1	1						-
Copper Cu	&			6	.5						
	73										
Make-up P Water	M	NaCl TE			1M	COCs - N	aCl	COCs - TH	COCs	- MM	
Analysis	80 1	120 18	0 6	- 69	/						
CT - Chemical	prmp.	biter la Chemici	J pon	unde i	Slight	المن الم	tmen-	t to endy			
Other - Chamics Nitrite 1	linhii evels	hiter lun	AJ	ded	2.596	1 of	Car	to to bes	<i>†</i>		
,			/								
								•			
	~~~										
	$\overline{}$						_				
Customer's Signature & I	Date:	4/5	840	1	KC	C Service R	ep's Signa	ture & Date:	Cr	E	<i></i>



# Kibler Chemical Corporation, Inc. 1610 Orange Avenue, St. Cloud, FL 34769

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WATEI				FEED & BLEED INSPECTION UP=working DN UR=under	REP	ORT f service					
Location: 22			24205		(O11L)			Current Equipment	UP	DN	UR
Contractor: CO	NTACT	: ROBERT	Г 941 737-0	0322			==	Conductivity Controller			
							_	Feed & Bleed Controller			
Attention:			150.74	Da	ite://	117/	22	System Flow Switch			
SAMPLE SOURCE	E: UNIT	NAME &	NUMBER	RECO	DMMEN	DED LIN	IITS	Bleed Valve			
Reported in PPM				100	, 01/	1008		Water Meter Inhibitor Timer			
Reported in 1111	CT	CHU		FROM	TO	FROM	ТО				-
Phenolphthalein P	20							Algaecide Timer Inhibitor Pump			
Total Alkalinity M	180			4	400			Algaecide Pumps			
Chloride NaCl	200			4	300						
Total Hardness TH	400			Ž	450			Treatment Chemicals			
Hydrogen PH	9.8	11.1		_	-	8.7	10.1	CUT 153 WY			
Conductivity MM	1433	1281		≈	1600	1600	4000	Co-6-545 bus	ا رن	018	
Sequest/Polymer Seq.	4			6	12	100		Treatment Chemicals	Added	And	Or
Iron FE	Z	×		1	1.0	6	1.0	Delivered: 50 15		And	0.1
Molybdenum Mo	i				1.0		1.10	2.59 107	2.5	- /~	T20
Nitrite NaNO ₂		400				600	1000	7	0		
Sulfite SO ₃		100				800	1000				
Phosphate PO ₄								Water Meter Reading	:		
Bromine NaBr											_
Copper Cu	Ø			4	. <						
Make-up P Water	M	NaCl	TH		ИM	COCs - N	aCl	COCs - TH	COCs	- MM	
Analysis D	604	100	180	63	5)			(4)			
0- 01		1	2 10 10	7 ) z	1:			1			
C) - Chemic	ck in	hibitor	51Jh	+14/00,	Music	- Sma	11 ad	justment to	y		
Chemica)	PUN	17. C	hemica	1 yumps	SCIA	ied a	~ d )	reidy.			
CH. CI	10	1 2/1	1-4-	015 /.114	- A	Λ <i>i l</i>	1 ^ -	1 0 = 3			
to 1005 +	remier	2 10.13	15/101	Slightly	10w, 1	fdded	2.5	sal of cate	0		
10 6,30	70 11117	C KOL	101	1000							
<del></del>											
		-									
Customer's Signature	& Date: _	1/4	1).	wy	KCC	Service Re	гр's Signai	ture & Date:	Ale		



1610 Orange Avenue, St. Cloud, FL 34769 407-957-2225 fax: 407-957-0643

WATER-ANALYSIS & SERVICE REPORT  FEED & BLEED EQUIPMENT INSPECTION REPORT												
Customer:		NATEE (				ENERG	Y PLAI	NT	The second of th	V= out o	f servi	ce
Location:	BRA	DENTO	N,FL	34205					Current Equipment	UP	DN	UR
Contractor	- CON	TACT: R	BERT	<del>941 737-</del>	<del>9322</del>				Conductivity Controller			
Contractor:	_ 04	34 [7	91)	737 –	3156				Feed & Bleed Controller			
Attention:					Da	te: <u>/</u> /	128/2	22	System Flow Switch			
SAMPLE SOURCE	E: UNIT	NAME &	NUMB	ER	RECO	MMEN	DED LIM	IITS	Bleed Valve			
Reported in PPM					Tw	11	1000		Water Meter			
Keporteu in 1111	CT	CHW			FROM	то	FROM	то	Inhibitor Timer			
Phenolphthalein P	20								Algaecide Timer Inhibitor Pump			
Total Alkalinity M	160				Ċ	400			Algaccide Pumps			
Chloride NaCl 200 4 300  Treatment Chemicals In Use:												
Total Hardness TH 380												
Hydrogen PH	8.7	9.9				,,,,	8.3	10.]				
Conductivity MM	1429	1282			<b>ラ</b>	1600	1000	4000	(~T>)	500	1078	T.
Sequest/Polymer Seq.	4	10 00			6	12	7-00	4000	Treatment Chemicals	Added	And	Or
Iron FE	8	0			<u></u>	1.0	6	1.0	Delivered: 12.55			
Molybdenum Mo	1				1	1		0	2.5 CuT 2	- , J		
Nitrite NaNO ₂	1	300			/		60 C	1000				
Sulfite SO ₃		300			1		000	1200				
Phosphate PO ₄						1			Water Meter Reading	:		
Bromine NaBr	1				)	J						_
Copper Cu	2			_	6	.5						-
Make-up P	М	NaCl	ТН	FE		IM	COCs - N	aCl	COCs - TH	COCs	- MM	$\neg$
Water Analysis	100	120	760			75			COCS - AM	COCS	- IVALVA	-
	1,00	1.00	101									
CT-Chemical	inhib	tor s.	1: c/+ /.	1 /00	, made	e sligi	lt ad	istm	ent to Chen		/	
fung. Che	Micc	1 pum	p pr	imed	and	recory	€″					_
		-										
CH ~ - Chem	rice /	inhibi	tar 1	res A	-dded	2.5	cf c	· wTa	te to boost A	11.45	te	_
100(1).												-
				_			•					_
		AD A			N. arabli				^ -	1	-	
Customer's Signature	& Date: _	Horly	2		1609284	KCC	Service Re	p's Signa	ure & Date: L	7h	_	



1610 Orange Avenue, St. Cloud, FL 34769 407-957-2225 fax: 407-957-0643 www.kiblerchemical.com

WATER-ANALYSIS & SERVICE REPORT  FEED & BLEED EQUIPMENT INSPECTION REPORT UP= working DN= out of service												
Customer:3	ANAT	EE COU	NTY – C	ENTR	AL ENE	RGY P	LANT	_	UP= working D UR = unde			:e
Location: B	RADEN	ST W NTON , F	L 3420	5				_	Current Equipment	UP	DN	UR
_ с	ONTAC	T: ROBE	RT 941 7	37-032	2			_	Conductivity Controller			
Contractor:									Feed & Bleed Controller			
Attention:					Da	te: 9	12118	21	System Flow Switch			
SAMPLE SOURCE	E: UNIT	NAME &	NUMB	ER		MMENI			Bleed Valve			
						wef	1000		Water Meter			
Reported in PPM	CT	OHW			FROM	TO	FROM	ТО	Inhibitor Timer			
Phenolphthalein P	20		_						Algaecide Timer			
Total Alkalinity M	1 7				,	12.			Inhibitor Pump			
Algaecide Pumps												
					4	300			Treatment Chemical			
	400				1	450		_	COUT 153	Busa.	nl	078
Hydrogen PH	83	10.4				171	8-3	10.1	Cub-5H5			
Conductivity MM	1477	1286			~	1600	1000	4000	CVT 20			
Sequest/Polymer Seq.	6				6	12			Treatment Chemical			
Iron FE	ð	8			4	1.0	6	1.0	Delivered: 25	alc	0-10	20
Molybdenum Mo												
Nîtrite NaNO ₂	( :	=400	)				600	1000				
Sulfite SO ₃												
Phosphate PO ₄									Water Meter Readin	g:		
Bromine NaBr	1											
Copper Cu	16				4	.5						
	_											
Make-up P Water	M	NaCl	TH	F		1M	COCs - N	[aCl	COCs - TH	COCs	- MM	
Analysis	100	170	260	0 0	1 8	95-						
CT - All to No further CHO. Dhem boost N.	81.6	15.00							primed and	rem Ho	dy	
Customer's Signature	& Date:	yann	140	ىسى	4	KCC	Service R	ep's Signa	ture & Date:	at		

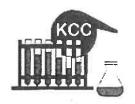


WATEI	R-ANALY		FEED & BLEED I			11					
MA	NATEE COUN	ITY – CENTRA					UP= working DN	= out of		e	
Customer: 323	9 TH ST W	0.4005					UR = under	repair			
Location: CON	NTACT: ROBER	- 34205 T 941 737-0322					Current Equipment	UP	DN	UR	
Contractor:							Conductivity Controller				
No.	-			A 1	0 7	7	Feed & Bleed Controller				
Attention:	berl				8-27		System Flow Switch Bleed Valve				
SAMPLE SOURCE	E: UNIT NAME	& NUMBER	RECO	MMENI	DED LIM	IITS	Water Meter				
Reported in PPM	115	Chell	Tober	-	1000	/Chil	Inhibitor Timer				
Reported in 11 M	CI	LOOP	FROM	то	FROM	то	Algaecide Timer				
Phenolphthalein P	40	-					Inhibitor Pump				
Total Alkalinity M	200		4	400	1		Algaecide Pumps				
Chloride NaCl	300		_	500			Treatment Chemicals	In Use	:		
Total Hardness TH	2-900		4	400		<u> </u>	- K53/102	(19)	)	. 4	
Hydrogen PH	8.79	10.1		-	83	10.		- 5			
Conductivity MM	1920	800	4	2000	4	4000		H			
Sequest/Polymer Seq.	28		u	10		-	Treatment Chemicals	Added	And (	Or	
Iron FE	<del></del>	<del></del>	4	0.2	1	0.	Delivered:	122			
Molybdenum Mo	1			_		~	565-102	-			
Nitrite NaNO ₂	1	150	400	1000	100	4000				-	
Sulfite SO ₃		1	- /	(	1	1	Water Meter Reading				
Phosphate PO ₄							Water Meter Reading				
Bromine NaBr	- 4	N. C.		- (	ı.						
Copper Cu	0	0	/	0.3	4	0.3					
					GOG N	L.CI	COCs - TH	COCs	MM	7	
Make-up P Water	M NaC	TH .	FE M	M	COCs - N	aCI	COCS-IH	cocs	- 141141		
Analysis	12714	) 200		/1							
tou	CON	1211 5 1558	- and	ati	Rist	IWE.	Male small	00	15	-	
- Joseph	WARK	+ 10 Sei	2-10-10	wer	SIN	the			7		
-	71-10-11		7								
	1 1 4		4	- 1	(	-1-	A	45.	1	- A	
Chul	led Voop?	Styl Metal	19509	oca c	hemi	-5, ()	norge at m	1115	TIN	2,	
	V_										
	-									====	
9											
		1					11				
Customer's Signature	Customer's Signature & Date: 4 KCC Service Rep's Signature & Date:										
Customer's bignature	Jane Fritt	Juliu C					1000	50/			





WATER-ANALYSIS & SERVICE REPORT	FEED & BLEED EQUIPMENT INSPECTION REPORT
MANATEE COUNTY – CENTRAL ENERGY PLANT  Customer: - 323 9 TH ST W	UP= working DN= out of service UR = under repair
Location: BRADENTON, FL 34205 CONTACT: ROBERT 941 737-0322 Contractor:	Current Equipment UP DN UR Conductivity Controller Feed & Bleed Controller
Attention: Date: 1-29-22	System Flow Switch
SAMPLE SOURCE: UNIT NAME & NUMBER RECOMMENDED LIMITS	Bleed Valve
5.12.23.50.50.50.50.50.50.50.50.50.50.50.50.50.	Water Meter
Reported in PPM C+ CL   Occe   Cop chill   FROM TO FROM TO	Inhibitor Timer Algaecide Timer
Phenolphthalein P 28	Inhibitor Pump
Total Alkalinity M 40 / 2 40 22 000	Algaecide Pumps
Chloride NaCl 280	Treatment Chemicals In Use:
Hydrogen PH Q.\ \ \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \)	153 20 100 1018
Conductivity MM 1983 1404 2 1800 < 4500	515
Sequest/Polymer Seq. 5.10	Treatment Chemicals Added And Or
Iron FE +2 +0 2/10 -10	Delivered: 1.588-153
Molybdenum Mo	1.5-Cwt-20
Nitrite NaNO2 (440)	
Sulfite SO ₃	Water Meter Reading:
Phosphate PO ₄	water meter reading.
Bromine NaBr	
Copper Cu — — — — — — — — — — — — — — — — — —	
Make-up Water Analysis P M NaCl TH FE MM COCs - NaCl	COCs - TH COCs - MM
Tower: 125ting looks, good at this small adjustments as new placed chamilles to chemical peaced 24 515 of cut-20 chamical to brung cut-10 2000	time made d to controller Rud tanks b dulled loop P Ago: Newa h continners
Customer's Signature & Date: M Junh KCC Service Rep's Signature	uture & Date:



	WATER-ANALYSIS & SERVICE REPORT									PME ORT	
Customer. 325	3 9 TH S7	w		TRAL ENE	RGY PL	ANT	_	UP= working I UR = und	N= out o er repair		e
BR   Location: CO	ADENT	ON, FL	34205 941 737-0	322				Current Equipment	UP	DN	UR
			041707-0				_	Conductivity Controller	1		
Contractor:							_	Feed & Bleed Controlle			
Attention:				Da	ite: 💪	15 1	12	System Flow Switch	1		
SAMPLE SOURCE	E: UNIT	NAME &	NUMBER	REC	OMMEN.	DED LIN	1ITS	Bleed Valve			
n				To	ver	10	m>	Water Meter	-		
Reported in PPM	Ci	CI		FROM	то	FROM	то	Inhibitor Timer	ś		
Phenolphthalein P	20							Algaecide Timer  Inhibitor Pump			
Total Alkalinity M	180			4	100			l————			
Chloride NaCl	Chloride NaCl (2000) Agactice rumps										
Total Hardness TH	850			_	000			Treatment Chemica			
Hydrogen PH	8 70	10.01		83		8.3	10.1	100	7		-
Conductivity MM	754	1297		1	900	24		1019		7.	_
Sequest/Polymer Seq.	101	12.1		10	10			Treatment Chemica	ls Adde	d And	Or
Iron FE	01	0		2	1.0	11	.0	Delivered:	53		
Molybdenum Mo	1	/						& CuBOO			
Nitrite NaNO2		(n00				(000	1000	E- 1078			
Sulfite SO ₃								***	_	_	_
Phosphate PO ₄	5							Water Meter Readi	ıg:		
Bromine NaBr											_
Copper Cu	0			1	,3	2	,3	-			
Make-up p	М	NaCl	тн	FE	MM	COCs - N	JaCl Jack	COCs - TH	COCs	- MM	
Water	80	150			771	COCS-1	taer	0003 111		112012	
Analysis			3 10			-					
Town V	lead or	95 to	ostal	as th	in k	ecom	porto	of Link			
	(	J NO	SOLOK	tments	1000	led X	+ +		100		
\								-			
Chil LE	500	n, +, +	e Lev	els 5	1.11	9000	1 to	+ 1007 s			
5/0W/ LO	asira	61A-10									
								/	()		
						- (	Come	21 Vinler	aly /	/	
Customer's Signature	sustomer's Signature & Date: 15.22 KCC Service Rep's Signature & Date: 6-15.22										



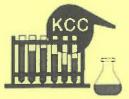
	N		ALYSI E COUN							UP= working	D EQUIPMI ON REPORT DN= out of serv der repair	
Custome			TON , FL	34205					-	Current Equipment	UP DN	UR
Location	1: C	ONTACT	: ROBER	T 941 737	-0322				_	Conductivity Controll	-	
Contrac	tor:							pro Mily Administrative of		Feed & Bleed Control		
Attentio							te: 5	26.23	2	System Flow Switch	11	
SAMPLE							-	DED LIM		Bleed Valve	Separate Sep	
SAMPLE	SOURCI	E: UNII	NAIVIE &	NUMBER		RECC	AVIIVILEI ()			Water Meter		
Reported in	PPM	CT	اینما			7000 FROM	TO	FROM	TO	Inhibitor Timer		
Dhan that	lain P		CL			INOM	10	TAOM		Algaecide Timer		
Phenolphtha		36								Inhibitor Pump	1	
Total Alkalin		200				14	1			Algaecide Pumps	J.	
Chloride	NaCl	250				13				Treatment Chemic	cals In Use:	
Total Hardness TH 650												
Hydrogen	PH	9.11			- 4	- 01	n					
Conductivity			1318		- 1	1	200	24	000			
Sequest/Poly		6.3				4	10			Treatment Chemic		d Or
Iron	FE	0	, ک				1.0	4	1.0	Delivered: 5		
Molybdenur										B-cals	42	
Nitrite	NaNO ₂		600					000	1000			
Sulfite	SO ₃									Water Meter Read	ing:	
Phosphate	PO ₄											
Bromine	NaBr											
Copper	Cu	R	18			1	, 3	ム	3			
Make-up	P	М	NaCl	TH	FE	T	MM	COCs - N	laCl	COCs - TH	COCs - MI	M
Water Analysis	18	100	117	280		8	12					
Jours Johns			J Je	ested Ten:sh	tec/	Che			nm Ex	eled L'a	1	
-				٢						hoge a	Clang)	
Customer	's Signatur	e & Date:	YM	n A	ml	_	KC	C Service l	Rep's Signo	ature & Date: 5 - 2	26.22	



WATER-ANALYSIS & SERVICE REPORT  Customer: MANATEE COUNTY - CENTRAL ENERGY PLANT						FEED & BLEED EQUIPMENT INSPECTION REPORT UP= working DN= out of service UR = under repair					
Customer: MANATEE COUNTY - CENTRAL LINE								UR = unde	r repair		
323 9 th ST W								Current Equipment	₩P	DN	UR
Location: RRADENIUN, FL 04200								Conductivity Controller	1		
Contractor:								Feed & Bleed Controller	1		
Attention: Date: 4-15-22								System Flow Switch			
							Bleed Valve	1			
BALIN BE SOUNCE	I on					Water Meter	1				
Reported in PPM	CT	CL	i	FROM	TO	FROM	TO	Inhibitor Timer	1		
Phenolphthalein P	32							Algaecide Timer	-		
Total Alkalinity M	220			< 4	100			Inhibitor Pump  Algaecide Pumps	V -		
Chloride NaCl	250			1	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -				+		_
Total Hardness TH	7 J J J J J J J J J J J J J J J J J J J							Treatment Chemicals In Use:			
Hydrogen PH	600	10.01		83	100	8.3	10 1	153, 107	<u> </u>		
Conductivity MM	1711			100	900			//_35			
Sequest/Polymer Seq.	1121	1354		1	10	270	100_	Treatment Chemical	s Adde	d And	Or
Iron FE	6.3	0		14	10		1.0	Delivered: 10 -			-
Molybdenum Mo	. /				1.0		7.0	De- 1075			
Nitrite NaNO2	<u> </u>	1 0			-	600	1000	0-1735			
Sulfite SO ₃	-	600			3	-	1000	0 10			
Phosphate PO ₄		-						Water Meter Readin	g:		
Bromine NaBr	-							-			
Copper Cu	~	6/			کہ		.3				_
Copper	10		Air or a				2				
Make-up P	М	NaCl	TH	FE N	/IM	COCs - N	laCl	COCs - TH	COC	s - MM	
Water Analysis	100	1 112	254	8	60						
pure 6	Dure Readings with in Lecommenal Limits TellerisHed Chemicals										
064 4	F00	5 /	205,00	antes	•						
CINIL A	DU T	1) /	2005, 00	WATER	• •						
*			$\sim$								
1.			1.		1.			/	A	1	
								$\sim$	//		
-			1			-		Leep, 1 Ops	11	0. 1	/
		1/		11				7	in	1	
Customer's Signature	e & Date: _	TUNN	Tun	h_	KC	C Service l	Rep's Sign	ature & Date: <u>4</u> -15	-22	U	



WATER-							FEED & BLEE INSPECTION UP=working	_	ORT	
MANA   Customer: _ 323 9	TEE COUNT	Y – CENTRA	L ENER	GY PLA	INT	_	UR = un	der repair		
Location: BRAD	Current Equipment	UP	DN	UR						
	Conductivity Controlle	er \								
Contractor:				. ~		_	Feed & Bleed Controll	er		
Attention:			Da	te: <u>3</u>	17.2	2_	System Flow Switch			
SAMPLE SOURCE: \	UNIT NAME &	NUMBER	RECO	MMEN	DED LIM	IITS	Bleed Valve	-		
\$10°		Self-		<b>2</b> ≤ 70	Lec	· .	Water Meter			
Reported in PPM	17 C/	ŭ	FROM	TO	FROM	TO	Inhibitor Timer		r)	
			7101/1		11011		Algaecide Timer			
	20		12	V/ 057			Inhibitor Pump			
	36			400			Algaecide Pumps			
	80		~	400			Treatment Chemic	als In Us	e:	
Total Hardness TH	50		1	800			153 107	5		
Hydrogen PH 👸	9610.0		1	10.01	8.3	10.1	Cw 8514.	S		
Conductivity MM	198 1402		1	700	24	202				
Sequest/Polymer Seq.	,.3		6	10			Treatment Chemic	als Adde	d And	Or
Iron FE	2 . 1		1	1.0	41.	0	Delivered: 10	<u> </u>	4	
Molybdenum Mo							2016			
Nitrite NaNO ₂	600				000	1000	P-cmb	4S.		
Sulfite SO ₃	250					76-0				
Phosphate PO ₄							Water Meter Read	ing:		
Bromine NaBr							-			_
Copper Cu	1 8		ム	1,3	ノ	٤3	-			
Make-up p	M NaCl	TH :	FE N	MIM MIN	COCs - N	aCl	COCs - TH	COC	- MM	
Water	100 120	304		54	0003-1	aci	0005 121			
Analysis /	-	1-26-71	()°			$\overline{}$				
Tower "	hemping	testes	hu	44	(n)	Leco	menofec	11	A	4
) <del></del>		Ke He	ni5He	2-11	760	1.1.1.				
		1.0110	-107E		nom.	376		1.9		
Ch: 11 100	? test	ed wit	h	n 2	3(0m)	nonch	erl Lin	45		
1007 54:	LL loss	1/20 400	7 - 50	W 9	Allens	an	renth			===
J.			,	<u> </u>		1		1		
								1		
						- ( -	X ~ a (), ) (	1. 0	- x	_
	10	A	,					12 1 20	men	<i>)</i> 
Customer's Signature & I	Date: ZM	Front		KC	C Service R	Rep's Signa	ture & Date: 3	17	75	



Customer's Signature & Date:

## Kibler Chemical Corporation, Inc.

KCC Service Rep's Signature & Date:

1610 Orange Avenue, St. Cloud, FL 34769 407-957-2225 fax: 407-957-0643

10000									www.kible	rchem	ical.	com
WATEI								1			ORT f service	
Customer: _ MAI	NATEE	COUNT	Y - CEN	TRAL	ENERG	Y PLA	NT			1770	TORT	TID
Location: 323	9 ^{IH} ST	W EL	24205					_	Current Equipment	UP	DN	UR
Contractor: CON	TACT:	ON, FL ROBERT	941 737-	0322					Conductivity Controll Feed & Bleed Control			-
		NODE. C.					W 11 = E	2	System Flow Switch	ici		
Attention:							10-1		Bleed Valve			
SAMPLE SOURCE	E: UNIT	NAME &	NUMBE	R	RECO	MMEN	DED LIM	IITS	Water Meter			
Reported in PPM	4 -	20.00			Tou	m	100	13	Inhibitor Timer	- 17 1		
Troportou ar 1 1 12	CT	CC			FROM	то	FROM	ТО	Algaecide Timer			
Phenolphthalein P	4								Inhibitor Pump			
Total Alkalinity M	120				44	100			Algaecide Pumps			
Chloride NaCl	124				15	00			Treatment Chemic	als In Hs		
Total Hardness TH	140				19	00				BS 145		ile:
Hydrogen PH	8.85	10.01			8.3	10.1	8.3	10.1	1078			
Conductivity MM	1010	1421			25/1	700	241	900				1
Sequest/Polymer Seq.	4.8				le	10			Treatment Chemic	als Added	l And	Or
Iron FE	,2	85			1	1.0	1	1.0	Delivered;	133		71
Molybdenum Mo									8- CWBSIN	4		
Nitrite NaNO ₂		600					600	1000	8-1018			
Sulfite SO ₃									Wester Meter Dood	l'ag.	_	
Phosphate PO ₄									Water Meter Read	ung:		
Bromine NaBr									<u> </u>			_
Copper Cu	0	85			1	. 3	×	3	-			_
Make-up p Water	M	NaCl	TH	FF		IM	COCs - N	aCl	COCs - TH	COCs	- MM	
Analysis	72	120	300		82	5						
Tower K	eading	is t	estect its	Lou	who	ie to	1000 12mor	ren Te	over Flow	9		
Chill Lo	07	Hx15	a de	NK	30m	2 whi	ore,					
-												
-												
										1		
<i>k</i>									Roge L	elen	The same	1
			1								//	



Kibler Chemical Corporation, Inc. 1610 Orange Avenue, St. Cloud, FL 34769 407-957-2225 fax: 407-957-0643 www.kiblerchemical.com

WATER-ANALYSIS & SERVICE REPORT						FEED & BLEED EQUIPMENT INSPECTION REPORT		
Customer: MANATEE COUNTY - CENTRAL ENERGY PLANT 323 9 TH ST W							UP= working DN= out of service UR = under repair	
Location:	BRADENT	IVV ON.FL 34	1205		Current Equipment UP DN UR			
	CONTACT:	ROBERT 94	1 737-03	322				Conductivity Controller
Contractor:		and the second second second			Feed & Bleed Controller			
Attention:		2.2	System Flow Switch					
SAMPLE SOURCE	E: UNIT NAI	ME & NUMB	ER	RECO	MMEN	DED LIM	IITS	Bleed Valve
Reported in PPM	,			TOI	ver	Loo	ږې	Water Meter
керопеи ін РУМ	CTC	-L		FROM	то	FROM	то	Inhibitor Timer
Phenolphthalein P	8							Algaecide Timer Inhibitor Pump
Total Alkalinity M	140			21	100			Algaecide Pumps
Chloride NaCl	180				000			
Total Hardness TH	450				000			Treatment Chemicals In Use:
Hydrogen PH	9.399.	89		8.3	10.	83	10.1	153, 1078
Conductivity MM	1196 14	73			900		000	CWBSH5
Sequest/Polymer Seq.	6.3			6	10			Treatment Chemicals Added And Or
Iron FE	2	/			1.0	41.	_	Delivered - 53
Molybdenum Mo	, , ,	-				/.		0-1078
Nitrite NaNO ₂	6	90				600	1000	Or Callet
Sulfite SO ₃	1					COL	1000	
Phosphate PO ₄								Water Meter Reading:
Bromine NaBr								
Copper Cu	0 0	7		4	.3	4	,3	
Nr.1								
Make-up P Water		NaCl TH			IM C	COCs - N	aCl	COCs - TH COCs - MM
Analysis Ø	80 1	04 29	v	//	3			
Tower !	Readin	95 tes	ted.	with	in!	Leco	nne	noted Limits
Ç <del></del>		120 A	Dist	m. Prais	t. nee	ed XI	t 1:m	re of service
		100 1	m1021	merv	1. 1100	E 141	7	re.
Ch: 11 Lo	27 5	Stice	Les	MK.ng		355	2400	since October
\$ Recom	mended	DDD		Black	669	ht	Dye	to the 100 p
( <del></del>			1			/	/	
								Con 1 Malount
		910	77					sugar se carrel
Customer's Signature	& Date:	m Li	mle		KCC	Service R	ep's Signa	ture & Date: 1 21-22



Kibler Chemical Corporation, Inc. 1610 Orange Avenue, St. Cloud, FL 34769 407-957-2225 fax: 407-957-0643 www.kiblerchemical.com

WATER-A	WATER-ANALYSIS & SERVICE REPORT							
Customer: 323 9TH	UP= working DN= out of service UR = under repair							
Togetion: BRADEN	Location: BRADENTON, FL 34205							
CONTACT	T: ROBERT 941 737-032	Conductivity Controller						
Contractor	Feed & Bleed Controller							
Attention:		Date: 12-29.21	System Flow Switch					
SAMPLE SOURCE: UN	NIT NAME & NUMBER	RECOMMENDED LIMITS	Bleed Valve					
		130.0.1	Water Meter					
Reported in PPM	TCI	FROM TO FROM TO	Inhibitor Timer					
	1 0	11012	Algaecide Timer					
30			Inhibitor Pump					
Total Alkalinity M /72		2 400	Algaecide Pumps					
Chloride NaCl 20		2500	Treatment Chemicals In Use:					
Total Hardness TH 46	0	2900	153 1078					
Hydrogen PH 8.7	15	8.3 10.18.3 10.1	Carlsts					
Conductivity MM 142	8 1546	S/800 14000						
Sequest/Polymer Seq. 6		6 10	Treatment Chemicals Added And Or					
Iron FE		21.0 21.0	Delivered: 15- 155					
Molybdenum Mo		1 1	8-1078					
Nitrite NaNO2	700	(00)/000	e calstis					
Sulfite SO ₃			Water Mater Des Jimes					
Phosphate PO ₄			Water Meter Reading:					
Bromine NaBr			·					
Copper Cu	- 0	1.3 1.3						
			222 224					
Water	M NaCl TH	FE MM COCs - NaCl	COCs - TH COCs - MM					
Analysis 6	64 100 220	680						
Tower (	Keal D'ngs test	ted within Recomme	ended 1:mits					
	<u> </u>	/ 0/						
·	renen	isted Chemicals						
			<del></del>					
-015.	10 0111	1 10 10 100	01/- 10					
Chi 1 1007	is St. LL	Loasing WATG	11.41.46					
Levels at	e still Go	90d						
· · · · · · · · · · · · · · · · · · ·								
	·		Rose Delais					
	71.1	//	TOTAL NEW Y					
Customer's Signature & Da	te: Ym Lyne	KCC Service Rep's Signa	ature & Date: 12 · 29 · 21					



1610 Orange Avenue, St. Cloud, FL 34769 407-957-2225 fax: 407-957-0643

WATER-ANALYSIS & SERVICE REPORT						FEED & BLEED EQUIPMENT INSPECTION REPORT				
Customer:	UP= working DN= out of service UR = under repair									
Location:	Current Equipment	ŲР	DN	UR						
	BRADENTON, FL 34205 CONTACT: ROBERT 941 737-0322									
Contractor:										
Attention:			Da	te: <u>// ·</u>	18.2	<u> </u>	System Flow Switch	- Address		
SAMPLE SOURCE	E: UNIT NAME &	& NUMBER	RECO	MMEN	DED LIM	IITS	Bleed Valve			
Reported in PPM	4-1-		To	ver	Low	ς.	Water Meter	. И		
Reported in PPM	CT CI		FROM	ТО	FROM	ТО	Inhibitor Timer			
Phenolphthalein P	160						Algaecide Timer	1		
Total Alkalinity M	220		14	100			Inhibitor Pump  Algaecide Pumps			
Chloride NaCl	240		12!	700				V		
Total Hardness TH	600		1	800			Treatment Chemica	ls In Use:		
Hydrogen PH	8.43 10.00		3.3	10.1	8.3	10.1	123 101	8	_	
Conductivity MM	1663 1/021		101	900	240	11.50	_ Cws	5115		
Sequest/Polymer Seq.	20		10	10	70		Treatment Chemica	la Addad		O 10
Iron FE	48		21	,0	41	.0	Delivered Delivered	S Added ?		)I
Molybdenum Mo	1			, -			15-153	12-	10	78
Nitrite NaNO ₂	800				(000)	1000	Or CUBSH			0
Sulfite SO ₃	,,,,,,		-			700"	Co-son.			
Phosphate PO ₄			_				Water Meter Readii	ıg:		
Bromine NaBr										_
Copper Cu	2 2		1	, 3	1.	3				-
Make-up P	M NaCi	TH F	E M	IM	COCs - N	aCl	COCs - TH	COCs - 3	MM	$\neg$
Water Analysis	76 100	240	7.	10						
10 2	Dans.	1	100		)	- 1	11111		_	
Tower !	Mesau, pas	7 e.5 tec/	with	in K	20011	nerole	ed Limits			
	· · ·	Keilenish	ed o	100	a alc					_
A		THE HEITISH	eu C	rich	CALS					_
	^							1	_	
Chill Lo	R 15 57	ill Loos	SIM 6	JAL	r Bi	f 54	'LL testeci	ř.		_
with in	Lecommer	ded Lin	- J		ŧ):					
		7	1 100	7)		50 750				
I m the	7	Dye That	1 (cui)	,			and uses	2.11	7	
- HIMCH C	ight to R	letect Les	1/25	WhA.	t DU	you -	think abou	y Th.	×	
		1	1				Keye Liel	el el		
Customer's Signature	& Date: Tan	Han	<u>d</u> _	KC	Service Re	ep's Signat	ture & Date: 11-18	.210		



WATER-ANALYSIS & SERVICE REPORT	FEED & BLEED EQUIPMENT INSPECTION REPORT		
Customer: MANATEE COUNTY - CENTRAL ENERGY PLANT	UP= working DN= out of service UR = under repair		
- 323 9 th ST W	Current Equipment 'UP DN UR		
Location: BRADENTON, FL 34205	Conductivity Controller		
Contractor:	Feed & Bleed Controller		
Attention: Date: 19-15-21	System Flow Switch		
SAMPLE SOURCE: UNIT NAME & NUMBER RECOMMENDED LIMITS	Bleed Valve		
	Water Meter		
Reported in PPM Tower LOOP	Inhibitor Timer		
FROM TO FROM TO	Algaecide Timer		
Phenolphthalein P 20	Inhibitor Pump		
Total Alkalinity M 220 450	Algaecide Pumps		
Chloride NaCl 450	Treatment Chemicals In Use:		
Total Hardness TH U50 < 500	is 3 1/278		
Hydrogen PH 8.91 9.22 8.3 10.1 8.3 10.1	1 1201		
Conductivity MM 1405 1743 < 1500 < 4000			
Sequest/Polymer Seq. (3)	Treatment Chemicals Added And Or		
Iron FE 8 8 5 10 5 10	Delivered: 9-153		
Molybdenum Mo	C 1/278		
	DT-CirRSHS		
Nitrite NaNO ₂ (600 1052) Sulfite SO ₃	20.00		
	Water Meter Reading:		
Phosphate PO ₄	-		
Bromine NaBr	-		
Copper Cu 9 8 2 3			
Make-up P M NaCl TH FE MM COCs - NaCl Water	COCs - TH COCs - MM		
Analysis 8 64 - 208 651			
Tower Kespings tested with in K	ecommence of		
The state of the s			
Limits, NO ADJUSTMENTS needle	of At this time		
	6 6		
Unill LOOP tested within the	commercial Cm;		
LOOP is leaking some where-	1+ 15 Losing		
600 - 500 gAllows a month	Rose Chiano.		
	Windley At Joseph		
Customer's Signature & Date: Lim Europe KCC Service Rep's Sign	ature & Date: 10-1:5-2		

JOB - J59036

### MANATEE CO CLERK OF CIRCUIT CT

MANATEE CEP 323 9TH STREET WEST BRADENTON, FL 34205



Air Mechanical & Service Corp. 4311 W IDA ST TAMPA, FL 33614 United States Tel: (813) 875-0782

### J59036

#### **JOB DETAILS**

Job is Completed

SCHEDULED	JOB LEAD	CREW	
3/26/24, 8:00 AM	Dennis Clark		
JOB TYPE: SC-PM	JOBID#: SC3	24010.1	CUSTOMER PO#: P2400663
SALES REP: MC	CUSTOMER \	<b>WORK ORDER #:</b> 52199	TOTAL SYSTEM CHARGE (LBS):
NAME PLATE CHARGE (LBS):		NT LEAK TESTED AND TO CUSTOMER: No	SAVE TO SERVER FILE: NO
JOB DESCRIPTION			
QUARTERLY MAINTENANCE CHILLER, PUMPS, CT's	<b>=</b>		
JAN - MAR 2024			
B2404180			

#### **WORK DETAILS**

NAME	DESCRIPTION	QTY
Work Performed		
Notes: 3/25/24 completed Quarterly ma	intenance on chiller plant, chillers, cooling towers, pumps and mot	ors.
NOTE: CHWP ONE AND TWO, the actu	uator did not open up during test. Manatee facilities are looking into	o it.
Purchase Order Required		
Notes: None		
Additional Parts and Materials		
Notes: None		
Refrigerant Recovered		
Notes: None		
Refrigerant Added		
Notes: None		
Chiller Log		
Notes: Ch-1		
Chiller Log		

Air Mechanical & Service Corp.

Tel: (813) 875-0782

DocuSign Envelope ID: C58CCF4E-590B-4FCF-

-6666169CD877

JOB - J59036

NAME	DESCRIPTION	QTY
Notes: CH-2	•	
Inspection Log		
Notes: CHWP		
Inspection Log		
Notes: CWP		
Inspection Log		
Notes: CT-1 BAC		
Inspection Log		
Notes: CT-2		

## **POST SIGNATURE**

John S Hound

Name of signee:

None

## **PAYMENT**

All service work is cash upon completion. Should credit be authorized, billing charge must be paid.

Payments ere due and payable upon receipt of invoice. After 30 days, an account is considered past due and will be charged the maximum interest allowed under the state laws.

#### ATTORNEY'S FEES

Customer agrees that he will pay and reimburse Air Mechanical & Service Corp. for any and all reasonable attorney's fees which are incurred by Air Mechanical & Service Corp. in the collection of amounts due and payable hereunder.

#### LIABILITY

Air Mechanical & Service Corp.'s responsibility for injury to persons or property shall be limited to injury caused directly by Air Mechanical & Service Corp.'s negligence in performing the work covered by this order, and in no event, shall Air Mechanical & Service Corp. be liable for consequential, special, or indirect damages. Air Mechanical & Service Corp. shall not be liable for any loss, delay, injury, or damage that may be caused by conditions beyond Air Mechanical & Service Corp.'s control, including but not limited to acts of God, acts of Government, strikes, lockouts, fire, explosion, theft, riot, civil commotion, war or malicious mischief.

Air Mechanical & Service Corp. shall not be liable for bodily injury, personal injury or property damage, caused by or already caused by fungi or bacteria (mold), either alone or in combination with other substances or factors, and does not guarantee that any work performed by this company will correct or fix any existing fungi or bacteria (mold) conditions or prevent any future "fungi" or bacteria (mold) conditions of contamination. The following more clearly defines our position.

Air Mechanical & Service Corp. shall not be liable for:

- A. "Bodily injury" or "property damage" which would nor have occurred in whole or in part, but the accrual, alleged or threatened inhalation of, ingestion of, contact with exposure to, existence of, or presence of, any "fungi" or bacteria on or within a building or structure, including its contents, regardless of whether any other cause, event, material or product contributed concurrently or in any sequence to such injury or damage.
- B. Any loss, cost or expense arising out of the abating, testing for, monitoring, cleaning up, removing, containing, treating, detoxifying, neutralizing, remediating or disposing of, or in any way responding to, or assessing the effects of, "fungi" or bacteria by any other person or entity.

Air Mechanical & Service Corp.

Tel: (813) 875-0782



# AIR MECHANICAL & SERVICE CORP.

4311 W. Ida Street Tampa, FL 33614 (813) 875-0782 FAX (813) 873-2275 2700 Ave. of the Americas Englewood, FL 34224 (941) 475-3715 FAX (941) 475-3725 325 Anchor Road Casselberry, FL 32707 (407) 699-0454 FAX (407) 699-0690

# **CHILLER LOG**

1 AX (010) 013-2213 1701 (011) 1101	1707(401) 000-0000
NAME: Manatee CEP	ATION: 323-9th St W, Bradenton DATE: 3/25/24
UNIT #: CH-1 York	UNIT #:
MN:ykecetq7-epgs	MN:
SN:SNBM-120710	SN:
Electrical Report	Electrical Report
Compressor #:	Compressor #:
Nameplate Voltage:460	Nameplate Voltage:
Actual Voltage: 484 /486 /484	Actual Voltage:
Nameplate Amperage: 396 FLA	Nameplate Amperage:
Actual Amperage: 150 /155 /162	Actual Amperage:
Crankcase Heater Amperage:	Crankcase Heater Amperage:
Cooling Tower:	Cooling Tower:
Nameplate Voltage:	Nameplate Voltage:
Actual Voltage:/	Actual Voltage:
Nameplate Amperage:	Nameplate Amperage:
Actual Amperage:/	Actual Amperage:/
☐ Check All Aux. Contacts	Check All Aux. Contacts
☐ Compressor Stater Contacts	☐ Compressor Stater Contacts
Cooling Tower Fan Motor Contacts	☐ Cooling Tower Fan Motor Contacts
☐ Check Wire connection, tightness & Heat Fatigue	☐ Check Wire connection, tightness & Heat Fatigue
Runtime 32806 Start 11744	Runtime Start
Notes:	Notes:
Condenser Water Temp: In 75.4 / Out 78.2	Condenser Water Temp: In/ Out
Condenser Pressure / Sat.Temp: Pres: 83.8 Temp: 78	Condenser Pressure / Sat.Temp: Pres:Temp:
Evaporator Pressure / Sat.Temp: Pres: 36.6 Temp: 40.8	Evaporator Pressure / Sat.Temp: Pres: Temp:
Oil Pressure: <b>68.2</b> Oil Temp: <b>113</b>	Oil Pressure: Oil Temp:
Oil Level:	Oil Level:
Net Oil Pressure35.5	Net Oil Pressure
Low Oil Pressure Cut Out:	Low Oil Pressure Cut Out:
Entering Water Temp - Degrees F 50.6	Entering Water Temp - Degrees F
Leaving Water Temp - Degrees F 41.3	Leaving Water Temp - Degrees F
Liquid Line Sight Glass ☐ Clear ☐ Flash	Liquid Line Sight Glass ☐ Clear ☐ Flash
Compressor Superheat: Evaporator approach 0.1	Compressor Superheat:
Sat. Liquid Temp.: Subcool 1.6/ condenser approach 0.0	Sat. Liquid Temp.:
Annual Checks	Annual Checks
Meg Compressor Motor 14_	Meg Compressor Motor 1 4
2 5	2 5.
36	36
Check Pump down / Pressure Rise	Check Pump down / Pressure Rise
Check Freeze StatF Cut out	Check Freeze StatF Cut out
☐Check Flow Switch / DP Switch Cut Out	Check Flow Switch / DP Switch Cut Out
☐Check High Pressure Cut Out	Check High Pressure Cut Out
☐Check Water Pump Starter Interlock	Check Water Pump Starter Interlock
Check & Set Low Pressure Control	Check & Set Low Pressure Control
Check System for Leaks	☐ Check System for Leaks
Take Oil Sample	Take Oil Sample
Print	Print Dennis Clark 3/25/24



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# **CHILLER LOG**

JOB LOCATION LOCATION	DN: 323-9th St W, Bradenton DATE: 3/25/24
UNIT #:CH-2 York	UNÎT #:
MN:YKECETQ7-EPGS	MN:
SN:SNBM-120900	SN:
Electrical Report	Electrical Report
Compressor #:	Compressor #:
Nameplate Voltage:460	Nameplate Voltage:
Actual Voltage: 484 /486 /484	Actual Voltage:/
Nameplate Amperage: 396 FLA	Nameplate Amperage:
Actual Amperage: 160 /158 /162	Actual Amperage:/
Crankcase Heater Amperage:	Crankcase Heater Amperage:
Cooling Tower:	Cooling Tower:
Nameplate Voltage:	Nameplate Voltage:
Actual Voltage:/	Actual Voltage:
Nameplate Amperage:	Nameplate Amperage:
Actual Amperage:/	Actual Amperage:/
☐ Check All Aux. Contacts	Check All Aux. Contacts
☐ Compressor Stater Contacts	☐ Compressor Stater Contacts
Cooling Tower Fan Motor Contacts	Cooling Tower Fan Motor Contacts
Check Wire connection, tightness & Heat Fatigue	☐ Check Wire connection, tightness & Heat Fatigue
Runtime <u>28363</u> Start <u>6645</u>	Runtime Start
Notes:	Notes:
Condenser Water Temp: In 75.2 / Out 77.7	Condenser Water Temp: In / Out
Condenser Pressure / Sat. Temp: Pres: 83.2 Temp: 77.7	Condenser Pressure / Sat.Temp: Pres: Temp:
Evaporator Pressure / Sat.Temp: Pres: 34.2 Temp: 39	Evaporator Pressure / Sat.Temp: Pres: Temp:
Oil Pressure: 64.3 Oil Temp: 117.2	Oil Pressure: Oil Temp:
Oil Level: □ Full □ 3/4 □ 1/2 □ 1/4	Oil Level: □ Full □ 3/4 □ 1/2 □ 1/4
Net Oil Pressure35.4	Net Oil Pressure
Low Oil Pressure Cut Out:	Low Oil Pressure Cut Out:
Entering Water Temp - Degrees F 50.3	Entering Water Temp - Degrees F
Leaving Water Temp - Degrees F 43.2	Leaving Water Temp - Degrees F
Liquid Line Sight Glass	Liquid Line Sight Glass
Compressor Superheat:evaporator approach 4.2	Compressor Superheat:
Sat. Liquid Temp.:Subcool 2.2/ condenser approach 0.0	Sat. Liquid Temp.:
Annual Checks	Annual Checks
Meg Compressor Motor 14	Meg Compressor Motor 1 4 5.
2 5	
36	366
Check Pump down / Pressure Rise	
Check Freeze StatF Cut out	Check Freeze StatF Cut out Check Flow Switch / DP Switch Cut Out
Check Flow Switch / DP Switch Cut Out	
Check High Pressure Cut Out	Check High Pressure Cut Out
Check Water Pump Starter Interlock	Check Water Pump Starter Interlock Check & Set Low Pressure Control
Check & Set Low Pressure Control	_
Check System for Leaks	Check System for Leaks
☐Take Oil Sample	Take Oil Sample
Print	Print Dennis Clark  3/25/24



# AIR MECHANICAL & SERVICE CORP.

4311 W. IDA STREET TAMPA, FL 33614 (813) 875-0782 FAX (813) 873-2275 2700 Ave. of the Americas Englewood, FL 34224 (941) 475-3715

# **INSPECTION REPORT**

JOB NAME: Manatee CEP		LOCATION: 323-9th St W,	, Bra	denton	DATE: 03/25/24
Unit #:CHWP-1, ABB DRIVE	Unit #:CH	IWP-2, ABB DRIVE		Unit #;CHWI	P-3, ABB DRIVE
MN:ACH550	MN:ACH5			MN:ACH550	
SN:2145200364	SN:21452		7 1	SN:21452003	352
Electrical Report		Electrical Report	_	El	ectrical Report
☐ Electrical Connections	☐ Electric	al Connections		☐ Electrical C	
☐ Blower Motor	☐ Blower		7 1	☐ Blower Mo	
☐ Blower Contactors		Contactors		☐ Blower Cor	
☐ Condenser Motor	☐ Conder		7 i	☐ Condenser	Motor
☐ Condenser Contactor		nser Contactor		☐ Condenser	Contactor
☐ Compressor Motor	□ Compre	essor Motor		☐ Compresso	or Motor
☐ Compressor Contactor		essor Contactor		☐ Compresso	or Contactor
☐ Crankcase Heater		ase Heater		☐ Crankcase	Heater
☐ Readings Normal	☐ Reading	s Normal		☐ Readings N	ormal
Readings Other:	Reading		- 1	☐ Readings O	
Notes:	Notes:			Notes:	
12.8 amps @ 30 HZ 60 HP HYUNDAI MOTOR	12.7 amps @ 60 HP HYUN	0 30 HZ NDAI MOTOR		21.7 amps @ 36. 60 HP BALDOR	
Refrigeration Report		Refrigeration Report		Refr	igeration Report
☐ Visable Leaks	☐ Visable		7 1	☐ Visable Lea	
☐ Suction Pressure Normal	☐ Suction	Pressure Normal	7 1	☐ Suction Pre	ssure Normal
☐ Head Pressure Normal	☐ Head Pi	ressure Normal	T Î	☐ Head Press	ure Normal
☐ Oil Level (if appl.) Normal	Oil Leve	el (if appl.) Normal		Oil Level (if	appl.) Normal
☐ Compressor Superheat Normal		ssor Superheat Normal		☐ Compresso	r Superheat Normal
Notes:	Notes:			Notes:	
Evaporator & Condenser	Eva	aporator & Condenser	7 1	Evapor	ator & Condenser
Coil and Drain Report	C	oil and Drain Report		Coil a	and Drain Report
☐ Blower Bearings Greased	☐ Blower	Bearings Greased	7 i	☐ Blower Bea	rings Greased
☐ Evaporator Coil Clean	☐ Evapora	tor Coil Clean		Evaporator	Coil Clean
☐ Evap. Requires Cleaning		equires Cleaning		🗖 Evap. Requi	
☐ Condensate Pan Clean	☐ Conden	sate Pan Clean		Condensate	Pan Clean
Condensate Pan Req. Cleaning	☐ Conden	sate Pan Req. Cleaning		Condensate	Pan Req. Cleaning
☐ Condenser Coil Clean	☐ Conden	ser Coil Clean		☐ Condenser	Coil Clean
☐ Cond. Coil Requires Cleaning	Cond. C	oil Requires Cleaning		Cond. Coil F	Requires Cleaning
☐ Filters Changed	☐ Filters C	hanged		☐ Filters Chan	ged
☐ Requires Filter Change	☐ Requires	s Filter Change		Requires Fil	ter Change
☐ Drive Belts Good	☐ Drive Be	elts Good		☐ Drive Belts	Good
☐ Belts Require Replacing	☐ Belts Re	quire Replacing		☐ Belts Requir	e Replacing
☐ Evap. Motor & Bearings Greased	☐ Evap. M	otor & Bearings Greased	_ [	☐ Evap. Moto	r & Bearings Greased
Notes:	Notes:			Notes:	



# AIR MECHANICAL & SERVICE CORP.

4311 W. IDA STREET TAMPA, FL 33614 (813) 875-0782 FAX (813) 873-2275 2700 Ave. of the Americas Englewood, FL 34224 (941) 475-3715

## **INSPECTION REPORT**

JOB NAME: Manatee CEP	LOG	CATION: 323-9th St W,	Bradenton	DATE: 03/25/24	
Unit #:CWP-1	Unit #:CWP-	2	Unit #:CW	P-3	
MN:HLS284SR235B	MN:HLS284S		MN:HLS28	4SR235B	
SN:	SN:		SN:		
Electrical Report		ectrical Report		Electrical Report	
☐ Electrical Connections	☐ Electrical C		☐ Electrica	I Connections	
☐ Blower Motor	☐ Blower Mot		☐ Blower N		
☐ Blower Contactors	☐ Blower Cor		☐ Blower C		
☐ Condenser Motor	☐ Condenser		☐ Condens		
☐ Condenser Contactor	☐ Condenser			er Contactor	
☐ Compressor Motor	☐ Compresso	r Motor	☐ Compres		
☐ Compressor Contactor	☐ Compresso			☐ Compressor Contactor	
Crankcase Heater	☐ Crankcase			☐ Crankcase Heater	
☐ Readings Normal	☐ Readings No	☐ Readings Normal		☐ Readings Normal	
☐ Readings Other:			☐ Readings		
Notes:	Notes:		Notes:		
25 HP HYUNDAI MOTOR 24.2 amps 485 volts	24.2 amps 485 volts 25 HP HYUNDAI	MOTOR	25HP HYUND 24.3 amps 485 volts	AI MOTOR	
Refrigeration Report	Refri	igeration Report	Re	efrigeration Report	
☐ Visable Leaks	☐ Visable Lea	ks	☐ Visable L	eaks	
☐ Suction Pressure Normal	☐ Suction Pre	ssure Normal	☐ Suction I	Pressure Normal	
☐ Head Pressure Normal	☐ Head Press	ure Normal	☐ Head Pre	ssure Normal	
Oil Level (if appl.) Normal	Oil Level (if	appl.) Normal	☐ Oil Level	(if appl.) Normal	
☐ Compressor Superheat Normal	☐ Compressor	r Superheat Normal	☐ Compres	sor Superheat Normal	
Notes:	Notes:		Notes:		
Evaporator & Condenser	Evapor	ator & Condenser	Evap	orator & Condenser	
Coil and Drain Report	Coil a	nd Drain Report	Co	il and Drain Report	
☐ Blower Bearings Greased	☐ Blower Bear	rings Greased	☐ Blower B	earings Greased	
☐ Evaporator Coil Clean	Evaporator (	Coil Clean	☐ Evaporate	or Coil Clean	
■ Evap. Requires Cleaning	Evap. Requi	res Cleaning	Evap. Red	quires Cleaning	
☐ Condensate Pan Clean	Condensate	Pan Clean	☐ Condensa	ate Pan Clean	
☐ Condensate Pan Req. Cleaning	Condensate	Pan Req. Cleaning	☐ Condensa	ate Pan Req. Cleaning	
☐ Condenser Coil Clean	☐ Condenser (	Coil Clean	☐ Condense	er Coil Clean	
☐ Cond. Coil Requires Cleaning	Cond. Coil R	Requires Cleaning	Cond. Co	il Requires Cleaning	
☐ Filters Changed	☐ Filters Chan	ged	☐ Filters Ch	anged	
☐ Requires Filter Change	☐ Requires Filt	er Change	☐ Requires	Filter Change	
☐ Drive Belts Good	☐ Drive Belts (	Good	☐ Drive Belt	s Good	
☐ Belts Require Replacing	☐ Belts Require	e Replacing	☐ Belts Req	uire Replacing	
☐ Evap. Motor & Bearings Greased	☐ Evap. Motor	& Bearings Greased	☐ Evap. Mo	tor & Bearings Greased	
Notes:	Notes:		Notes:		



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## **INSPECTION REPORT**

JOB NAME: Manatee CEP		LOCATION: 323-9th St W	, Bradenton	DATE: 03/25/24
Unit #:CT-1A, ABB DRIVE	Unit #:CT	-1B, ABB DRIVE	Unit #:C	T-1 BAC
MN:ACH560	MN:ACH5		MN:PT2	-1218A-301
SN:2145200404	SN:21452		SN:U148	375302-01-01
Electrical Report		Electrical Report		Electrical Report
☐ Electrical Connections	☐ Electric	al Connections	☐ Electri	ical Connections
☐ Blower Motor	☐ Blower	Motor	☐ Blowe	
☐ Blower Contactors	☐ Blower	Contactors	☐ Blowe	r Contactors
☐ Condenser Motor		nser Motor	☐ Conde	enser Motor
☐ Condenser Contactor	☐ Conder	nser Contactor	☐ Conde	enser Contactor
☐ Compressor Motor	☐ Compre	essor Motor	☐ Comp	ressor Motor
☐ Compressor Contactor	☐ Compre	essor Contactor	☐ Comp	ressor Contactor
☐ Crankcase Heater	☐ Crankc	ase Heater	☐ Crank	case Heater
☐ Readings Normal	☐ Reading	gs Normal	☐ Readir	ngs Normal
☐ Readings Other:	☐ Reading	s Other:	☐ Readir	ngs Other:
Notes:	Notes:		Notes:	
8.2 amps @ 30.9 HZ	7.9 amps @	30.1 HZ		
Refrigeration Report		Refrigeration Report		Refrigeration Report
☐ Visable Leaks	☐ Visable	Leaks	☐ Visabl	e Leaks
☐ Suction Pressure Normal	□ Suction	Pressure Normal	☐ Suctio	n Pressure Normal
☐ Head Pressure Normal	☐ Head Pi	ressure Normal	☐ Head F	Pressure Normal
Oil Level (if appl.) Normal	☐ Oil Leve	el (if appl.) Normal	☐ Oil Lev	vel (if appl.) Normal
Compressor Superheat Normal	☐ Compre	essor Superheat Normal	☐ Compr	ressor Superheat Normal
Notes:	Notes:		Notes:	
Evaporator & Condenser	Eva	aporator & Condenser	Ev	vaporator & Condenser
Coil and Drain Report	C	oil and Drain Report		Coil and Drain Report
☐ Blower Bearings Greased	☐ Blower	Bearings Greased	☐ Blowe	r Bearings Greased
☐ Evaporator Coil Clean	□ Evapora	tor Coil Clean	□ Evapor	rator Coil Clean
☐ Evap. Requires Cleaning	☐ Evap. R	equires Cleaning	Evap. f	Requires Cleaning
☐ Condensate Pan Clean	□ Conden	sate Pan Clean	☐ Conde	nsate Pan Clean
☐ Condensate Pan Req. Cleaning	□ Conden	sate Pan Req. Cleaning	☐ Conde	nsate Pan Req. Cleaning
☐ Condenser Coil Clean	☐ Conden	ser Coil Clean	☐ Conde	nser Coil Clean
Cond. Coil Requires Cleaning	Cond. C	oil Requires Cleaning	☐ Cond.	Coil Requires Cleaning
☐ Filters Changed	☐ Filters C	hanged	☐ Filters	
☐ Requires Filter Change	☐ Require:	s Filter Change	☐ Require	es Filter Change
☐ Drive Belts Good	☐ Drive Be	elts Good	☐ Drive E	Belts Good
☐ Belts Require Replacing	☐ Belts Re	quire Replacing	☐ Belts R	equire Replacing
☐ Evap. Motor & Bearings Greased	☐ Evap. M	lotor & Bearings Greased	_	Motor & Bearings Greased
Notes:	Notes:		Notes:	



JОВ

# AIR MECHANICAL & SERVICE CORP.

4311 W. IDA STREET TAMPA, FL 33614 (813) 875-0782 FAX (813) 873-2275

2700 Ave. of the Americas Englewood, FL 34224 (941) 475-3715

## **INSPECTION REPORT**

^{јов} _{NAME:} Manatee CEP	LOCATION: 323-9th St W, E	Bradenton DATE: 03/25/24
Unit #:CT-2A, ABB DRIVE	Jnit #:CT-2B, ABB DRIVE	Unit #:CT-2 BAC
	MN:ACH550	MN:PT2-1218A-301
	SN:2145200392	SN:U148375302-02-01
Electrical Report	Electrical Report	Electrical Report
	l Electrical Connections	☐ Electrical Connections
	Blower Motor	☐ Blower Motor
	Blower Contactors	☐ Blower Contactors
	Condenser Motor	☐ Condenser Motor
	Condenser Contactor	☐ Condenser Contactor
	Compressor Motor	☐ Compressor Motor
	Compressor Contactor	☐ Compressor Contactor
	Crankcase Heater	☐ Crankcase Heater
	Readings Normal	☐ Readings Normal
	Readings Other:	☐ Readings Other:
	Notes:	Notes:
	i.2 amps @ 19.7 HZ	
Refrigeration Report	Refrigeration Report	Refrigeration Report
☐ Visable Leaks	] Visable Leaks	☐ Visable Leaks
☐ Suction Pressure Normal	Suction Pressure Normal	☐ Suction Pressure Normal
☐ Head Pressure Normal	Head Pressure Normal	☐ Head Pressure Normal
☐ Oil Level (if appl.) Normal	Oil Level (if appl.) Normal	Oil Level (if appl.) Normal
☐ Compressor Superheat Normal ☐	Compressor Superheat Normal	☐ Compressor Superheat Normal
Notes:	lotes:	Notes:
Evaporator & Condenser Coil and Drain Report	Evaporator & Condenser Coil and Drain Report	Evaporator & Condenser Coil and Drain Report
	Blower Bearings Greased	☐ Blower Bearings Greased
	Evaporator Coil Clean	Evaporator Coil Clean
	Evap. Requires Cleaning	☐ Evap. Requires Cleaning
	Condensate Pan Clean	☐ Condensate Pan Clean
	Condensate Pan Req. Cleaning	Condensate Pan Req. Cleaning
	Condenser Coil Clean	☐ Condenser Coil Clean
	Cond. Coil Requires Cleaning	☐ Cond. Coil Requires Cleaning
	Filters Changed	☐ Filters Changed
	Requires Filter Change	☐ Requires Filter Change
	Drive Belts Good	☐ Drive Belts Good
	Belts Require Replacing	☐ Belts Require Replacing
	Evap. Motor & Bearings Greased	☐ Evap. Motor & Bearings Greased
Notes:	otes:	Notes:



## JOHNSON CONTROLS **Building Efficiency** Federal ID 39-0380010

Doug Ryder 4/18/2023 MOO8465

**ORIGINAL INVOICE** 

Invoice #: PO #/Auth: 1-128656673394

Invoice Date: B23006555

04/07/2023 **Service Request:** 1-128585390846

**Customer WO#:** 

1630118 **Customer Acct:** 

L&M SR Type:

**Branch Name:** 

JOHNSON CONTROLS TAMPA FL CB - 0N0C

**Bill To:** 

MANATEE COUNTY BOARD OF COMMISSIONERS

PO BOX 1000

**BRADENTON FL 34206-1000** 

Service Site:

MANATEE COUNTY BOARD OF

COMMISSIONERS 393 9TH ST W,

**BRADENTON FL 34205-8629** 

Contractor/License Information :

Requested By: DOUG RYDER

Phone:

Service Requested:

Don R. (941) 737-3156 is requesting PM for Tube brush for chiller 1 and 2 at the at Central

Energy Plant 314 8th W BRADENTON.

Service Provided:

Customer requested we do the annual pm on chiller 1 first. York mod# ykecetg7-epgs ser# snbm120710 Isolated & drained & opened the condenser, Andre brushed the tubes and the vsd hx. Also I replaced the vsd inhibitor and cleaned its strainer and backflushed. Got pulled off job for an emergency call. Will return in the morning, job is incomplete.

Arrived on site. Removed bolts from the head of chiller 1. Set up tube brushing machine. Proceeded cleaning tubes. Cleaned exchanger. Greased gasket. Closed head and placed bolts back in. Filled condenser and check for any leaks. Cleaned area and removed tools. Arrived on site. Drained chiller 2. Removed bolts front the head to gain access to the tubes. Set up tube brushing machine. Proceeded to clean tubes. Cleaned tubes on the exchanger. Assisted with annual maintenance on chiller. Gasket to the head of the chiller will need to cure over night. Matt will return tomorrow to fill chiller and put back in operation. Cleaned area and check out.

chiller 1 &2 York mod# vkecetq7-epgs ser# snbm120710 replaced oil& refrigerant filters. Replaced vsd inhibitor. Lo/To power meaged motor windings, tightened electrical connections, inspected vsd components, electronically leak checked machines .calibrated prv feedback potentiometer, checked auto lube function, lubed prv& vgd linkages & checked stroke. Filled out oil analysis & shipping paperwork, took oil samples from chillers 1&2. Shipped to lab for analysis. Started up chiller 1 & logged readings. Checked fault histories & setpoints. Chiller 2 Isolated & drained the condenser, Andre brushed the condenser & vsd hx tubes. Job is incomplete.

chiller 2 York mod# ykecetq7-epgs ser# snbm120710 reinstalled the condenser head, refilled, bled air & leak checked. Added grease to auto luber, cleaned up area. Monitored the operation & logged chillers1&2 readings taken. Stroked and checked vod and Prv actuators. Noticed chiller 1 prv actuator is leaking hydraulic fluid &needs replacing. Worked up quote for repairs needed.

Annual comprehensive pms on chillers is completed.

Thank you for your business.

Qty	Description	UOM	Unit Price	Sub Total	Tax	Net Price
	Labor					
3.5	04/06/2023 Regular Chiller Heavy	Hour				
8	04/05/2023 Regular Mechanical Heavy	Hour				
9	04/05/2023 Regular Chiller Heavy	Hour				
8	04/04/2023 Regular Mechanical Heavy	Hour				
5	04/04/2023 Regular Chiller Heavy	Hour				
	Sub-Total					

## ATTACHMENT A

## SCOPE OF SERVICES

The successful vendor will be responsible for performing preventative maintenance and operational services on the COUNTY's cooling system at the Central Energy Plant (CEP) located at 323 9th St West. Bradenton, FL 34205, in accordance with prevailing industry standards and in substantial compliance with applicable manufacturer operation and maintenance requirements, as indicated in this document.

Replacement of failed items that are outside of their respective warranties is included as part of the preventative maintenance and annual service scope.

The successful vendor will maintain the personnel who will perform the service activities necessary to optimize operation while minimizing cost. Vendor services shall focus on procedures designed to enhance the safety and performance.

Manatee County Property Management (MCPM) requires vendor service activities to be maintained at the CEP facility proper. MCPM requests to receive all service activity documentation from service providers.

The successful vendor shall:

- Provide quarterly preventative maintenance and inspection services per equipment, (to maintain long term warranties)
- Provide annual maintenance and Inspection services per equipment.
- Provide Time and Material for all parts outside warranty per manufacturer requirements.
- Repair and replacement of failed parts outside the respective warranties

## **Pumps**

## **Quarterly Preventative Maintenance Schedule:**

The successful vendor shall:

- 1. Verify pump rotation.
- Inspect for leaks. Check for excessive pressure drop. Clean strainer, if required.
- 3. Lubricate motor bearings per manufacturer's recommendations.
- 4. Inspect coupling or belts and sheaves and adjust as required.
- 5. Inspect electrical wiring and tighten connections as required.
- 6. Inspect condition and check operation of motor contactor/starter.
- 7. Check for vibration.
- 8. Measure operating voltage and amperage and record readings.
- 9. Check customer logs with operator, discuss general operation of pump.
- 10. Record pertinent system temperatures and pressures to determine the existing operating conditions of the system.
- 11. Issue report with areas of concern noted, within two weeks of inspection date.

#### **Annual Service Schedule:**

#### The successful vendor shall:

- 1. Verify pump rotation.
- 2. Inspect for leaks. Check bolted connections. Repair seals and/or gauge connections, as required.
- 3. Check for cavitation/excessive noise.
- 4. Check for excessive pressure drop.
- 5. Clean strainer.
- 6. Lubricate motor bearings per manufacturer's recommendations.
- 7. Check packing or mechanical seals and adjust as necessary. Replace if necessary.
- 8. Check motor starter operation and condition of contacts and connections.
- 9. Check for excessive vibration.
- 10. Check condition of coupling or belts/sheaves.
- 11. Tighten all electrical terminal connections.
- 12. Measure operating voltage and amperage and record readings.
- 13. Record pertinent system temperatures and pressures to determine the existing operating conditions of the system.
- 14. Check customer logs with operator, discuss general operation of pump.
- 15. Vibration analysis once per year.
- 16. Issue report with areas of concern noted, within two weeks of inspection date. Report to include estimated remaining life.

## **Exhaust Fans**

#### **Quarterly Preventative Maintenance Schedule:**

The successful vendor shall:

- 1. Verify fan rotation.
- Inspect for duct/housing leaks. Check bolted connections/access doors. Check for excessive noise/vibration.
- 3. Check for excessive pressure drop across filter bank, as applicable.
- 4. Lubricate fan motor bearings per manufacturer's recommendations.
- 5. Inspect belts and sheaves and adjust as required.
- 6. Inspect electrical wiring and tighten connections as required.
- 7. Inspect condition and check operation of motor contactor/starter.
- 8. Measure operating voltage and amperage and record readings.
- 9. Check fan interlocks. Repair, as required.
- 10. Visually check sensors and gauges. Calibrate and repair/replace, as required.
- 11. Check logs with operator, discuss general operation of fan.

#### **Annual Service Schedule:**

The successful vendor shall:

- 1. Verify fan rotation.
- 2. Check for excessive noise/vibration.
- 3. Clean fan scroll.
- 4. Lubricate motor bearings per manufacturer's recommendations.
- 5. Inspect belts and sheaves and adjust as required. Replace as required.
- 6. Check motor starter operation and condition of contacts and connections.
- 7. Check for excessive vibration.

CEP Maintenance Responsibilities

- 8. Tighten all electrical terminal connections.
- 9. Measure operating voltage and amperage and record readings.
- 10. Check logs with operator, discuss general operation of system
- 11. Vibration analysis once per year.

## **Variable Frequency Drives**

## **Quarterly Preventative Maintenance Schedule:**

The successful vendor shall:

- 1. Check drive On-Off -Bypass switch, as applicable.
- 2. Check and tighten all electrical connections.
- 3. Check and clean heat sink and cooling fan as required.
- 4. Check cooling fan for abnormal noise and/or vibration. Lubricate bearings, as required.
- 5. Check and clean printed circuit board.
- 6. Check drive programming, verify operation.
- 7. Check customer logs with operator, discuss operation of drives.
- 8. Issue report with areas of concern noted, within two weeks of inspection date.

## **Annual Variable Frequency Drives Service Schedule:**

The successful vendor shall:

- 1. Check and tighten all electrical connections.
- 2. Check and clean heat sink and cooling fan as required.
- 3. Check cooling fan for abnormal noise and/or vibration. Lubricate bearings, as required.
- 4. Check and clean printed circuit board.
- 5. Check drive programming, verify operation.
- 6. Perform rectifier test and DC bus capacitor test, as applicable. Replace as required.
- 7. Check and clean/replace air filters as required.
- 8. Check customer logs with operator, discuss general operation of drives.
- 9. Issue report with areas of concern noted, within two weeks of inspection date. Report to include estimated remaining life.

#### Chillers

## **Quarterly Preventative Maintenance Schedule:**

The successful vendor shall:

- 1. Check for proper refrigerant charge.
- 2. Repair refrigerant leaks. Refill, as required.
- 3. Check control calibration and operation.
- 4. Inspect main electrical components.
- 5. Inspect external fittings and lines on compressor.
- 6. Inspect compressor operating oil level. Refill, as required.
- 9. Check compressor unloading/capacity control mechanism(s).
- Inspect electrical wiring and tighten connections as required.
   CEP Maintenance Responsibilities

- 11. Inspect condition and check operation of motor contactor/starter.
- 12. Lubricate motor bearings per manufacturer's recommendations, as applicable.
- 13. Check for vibration.
- 14. Measure operating voltage and amperage and record readings.
- 15. Check for evidence of moisture in refrigerant circuit.
- 16. Check and record refrigerant sub cooling.
- 17. Check sight glasses.
- 18. Check and record superheat.
- 19. Check and record all water temperatures and pressures.
- 20. Check and record compressor voltage and amperage.
- 21. Check expansion tank for proper air cushion.
- 22. Check electrical wiring for evidence of overheating and tighten connections as required.
- 23. Check crankcase heater operation.
- 24. Check refrigerant monitor and test.
- 25. Check flow switches.
- 26. Check anti-cycle switches.
- 27. Check operation of chilled water temperature controller.
- 28. Check customer logs with operator, discuss general operation of chiller/condensing units.
- 29. Issue report with areas of concern noted, within two weeks of inspection date.

#### **Annual Chiller Service Schedule:**

#### The successful vendor shall:

- 1. Furnish new compressor oil, filter and purge gaskets as indicated by oil test results.
- 2. Use Spectrographic oil analysis.
  - A. Draw oil sample from operating machine.
  - B. Provide clean sample container for oil sample to be tested.
    - C. Properly label sample bottle on site for delivery to test facility.
  - D. Provide written laboratory analysis of oil samples. Written laboratory report shall include oil condition, water content, acid content and wear metals content.
- 3. Pressurize (as required), thoroughly leak check unit and repair leaks.
- 4. Check and calibrate compressor safety controls.
- 5. Check and calibrate compressor operating controls.
- 6. Check Meg ohm test compressor and oil pump motor and record readings.
- 7. Inspect Vane motor, shaft, linkage and bearings.
- 8. Lubricate vane bearings.
- 9. Disconnect vane linkage and check for wear.
- 10. Reconnect linkage and check Pilot positioner setting.
- 11. Check Vane motor operation.
- 12. Check Motor Temperature Control Capillary.
- 13. Check Low Temperature Control Capillary.
- 14. Check motor cooling solenoid water valve.
- 15. Inspect condition of contactors, relays and timers.
- 16. Inspect compressor motor starter contacts for wear and pitting.
- 17. Tighten all compressor motor starter electrical terminals.
- 18. Check dashpot and dashpot oil in main starter.
- 19. Inspect and service purge per manufacturer's instructions.
- 20. Check crankcase heater operation.
- 21. Replace recommended refrigerant filters.
- 22. Check flow switch and external interlocks.
- 23. Remove and clean closed system pressure reducing valve strainer.
- 24. Remove condenser head and brush clean condenser tubes. Every year, inspect evaporator side tubes, brush clean as required.
- 25. At starter check line voltage, wiring tightness and condition, contractors, overloads, transition timer, mechanical interlock and fluid level and condition of overloads.

**CEP Maintenance Responsibilities** 

- 26. With main disconnect to starter OPEN dry run control circuit.
- 27. Check flow switches.
- 28. Check pneumatic electric switches.
- 29. Check anti-cycle switches.
- 30. Check operation of all additional safety controls.
- 31. Check operation of Chilled Water Temperature Controller.
- 32. At control panel check, High Pressure Control, Motor Temperature Control, Low Temperature Control, Oil Pressure Control, Oil Temperature Control, solenoid air valve, gauges, all relays, timer and control voltage.
- 33. Check Vibration analysis once per year.
- 34. Check customer logs with operator; discuss general operation of chiller/condensing units.
- 35. Issue report with areas of concern noted, within two weeks of inspection date. Report to include estimated remaining life.

#### **Cooling Tower**

#### Bi-Annual Preventative Maintenance Schedule:

The successful vendor shall:

- 1. Record pertinent system temperatures, pressures and electrical readings to determine the existing operating conditions of the system
- Inspect cooling tower belts, bearings, gears, drive shafts and/or sheaves. Replace worn belt(s), fill oil level(s), as required.
- 3. Check for proper system water make up. Inspect make-up water valve, clean/repair, as required.
- 4. Visually inspect cooling tower including distribution basins and heat transfer sections
- 5. Check in-line basket and sump strainer, as required. Flush with fresh water.
- 6. Check water treatment results, visually inspect strainers and fill for evidence of condenser water tube corrosion and/or fouling.
- 7. At condenser water strainer, open blow down valve to purge.
- 8. Refill tower and check operation of make-up valve and adjust sump water level.
- 9. Check customer logs with operator, discuss general operation of tower.
- 10. Issue report with areas of concern noted, within two weeks of inspection date.

## **Annual Cooling Tower Service Schedule**

The successful vendor shall:

- Record pertinent system temperatures, pressures and electrical readings to determine the existing operating conditions of the system.
- 2. Inspect protective finish.
- 3. Inspect for corrosion. Clean and repair surface, as required.
- Lubricate motor bearings and inspect grease lines per manufacturer's recommendations.
- 5. Check motor starter operation and condition of contacts and connections.
- 6. Check for excessive noise or vibration.
- 7. Check condition of mechanical coupling.
- 8. Inspect and clean thoroughly; fill, inlet louvers and eliminators as required.
- 9. Inspect water distribution system. Clean nozzles, as required.
- 10. Check oil level in gear reducer. Add oil as required.
- 11. Check for/repair basin water leaks.
- 12. Inspect and tighten loose bolts in framework. Replace, as required.
- 13. Inspect electrical connections, contactors, relays and operating/safety controls.

CEP Maintenance Responsibilities

- 14. Check and adjust condenser water temperature regulator system.
- 15. Completely clean cooling tower once annually.
- 16. Fill system after cooling tower has been cleaned.
- 17. Lubricate the driver and speed reducer.
- 18. Check bolts attaching mechanical equipment support to the tower as well as those attaching the driver and speed reducer. Make sure that the drive shaft is in place and secure.
- 19. Inspect fan/blade assembly. Inspect tip clearance, pitch angle and bolt torque. Adjust, as required.
- 20. Check customer logs with operator discuss general operation of tower.
- 21. Vibration analysis once per year.
- 22. Check customer logs with operator, discuss general operation of cooling tower.
- 23. Issue report with areas of concern noted, within two weeks of inspection date. Report to include estimated remaining life.

## **Refrigerant Monitors**

## Quarterly/Annual Refrigerant Monitor Service Schedule:

The successful vendor shall:

- 1. Check monitor calibration with appropriate refrigerant.
- 2. Check the audible and visual alarm system for proper activation and operation.
- 3. Check refrigerant monitor and all electrical connections.
- 4. Check the exhaust fan operation for proper activation and operation.
- 5. Check automatic damper.
- 6. Clean filters, as applicable.
- 7. Check customer log with operator, discuss general operation of system.
- 8. Issue inspection report with areas of concern noted, within two weeks of inspection date.