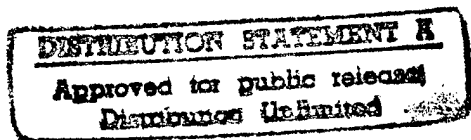


**A LIMITED ENERGY STUDY OF
HIGH TEMPERATURE AND CHILLED WATER DISTRIBUTION SYSTEMS
AT FORT STEWART AND HUNTER ARMY AIRFIELD, GEORGIA**

**VOLUME III
FIELD INVESTIGATION FORMS**

FINAL SUBMITTAL



Prepared For
Savannah District, Corps of Engineers

Contract Number DACA01-94-D-0038
Delivery Order Number 0002

Prepared by
Reynolds, Smith and Hills, Inc.
4651 Salisbury Road
Jacksonville, Florida 32256
(904) 296-2000

A handwritten signature in black ink, appearing to read "C. S. Warren".

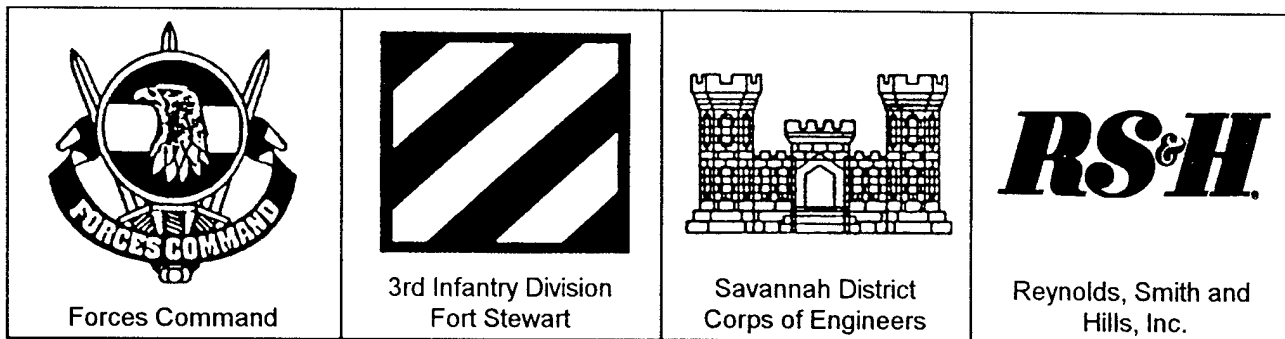
Carlos S. Warren, PhD, PE
Project Manager

A handwritten signature in black ink, appearing to read "William T. Todd".

William T. Todd, PE
Field Survey Manager

September 6, 1996

6941331002



19971022 116

TABLE OF CONTENTS

Volume	Section	Title	Page
ES		EXECUTIVE SUMMARY	
	1.0	INTRODUCTION	ES.1-1
	2.0	FACILITY DESCRIPTION	ES.2-1
	3.0	METHODOLOGY	ES.3-1
	4.0	ANALYSIS	ES.4-1
	5.0	RESULTS AND RECOMMENDATIONS	ES.5-1
I		NARRATIVE REPORT	
	1.0	INTRODUCTION	
		1.1 Authorization	1-1
		1.2 Objectives	1-1
		1.3 Work Accomplished	1-1
	2.0	FACILITY DESCRIPTION	
		2.1 General Description	2-1
		2.2 Central Energy Plant	2-1
		2.3 Satellite Energy Plant	2-1
		2.4 HTW Distribution Systems	2-1
	3.0	METHODOLOGY	
		3.1 General	3-1
		3.2 Quantify HTW Losses	3-1
		3.3 Locate Leaks in Underground HTW Piping	3-5
		3.4 Field Investigation Schedule	3-6
		3.5 Utility Rates	3-8
	4.0	ANALYSIS	
		4.1 Historical Make-Up Water Use	4-1
		4.2 Estimate of HTW Losses	4-9
		4.3 Water Quality and Treatment	4-16
		4.4 Evaluation of Energy Conservation Projects	4-19
	5.0	RESULTS AND RECOMMENDATIONS	
		5.1 Summary of ECO Evaluations	5-1
		5.2 O&M Recommendations	5-4



DEPARTMENT OF THE ARMY
CONSTRUCTION ENGINEERING RESEARCH LABORATORIES, CORPS OF ENGINEERS
P.O. BOX 9005
CHAMPAIGN, ILLINOIS 61826-9005

REPLY ~~TO~~
ATTENTION OF: TR-I Library

17 Sep 1997

Based on SOW, these Energy Studies are unclassified/unlimited.
Distribution A. Approved for public release.

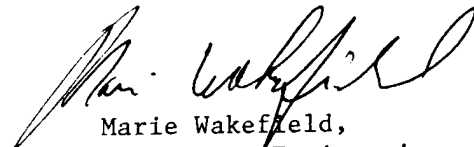

Marie Wakefield,
Librarian Engineering

TABLE OF CONTENTS (continued)

Volume	Section	Title	Page
I	6.0	FEMP PROJECT PROGRAMMING DOCUMENTS	
		6.1 Repair CEP and SEP HTW and Steam Leaks (ECO-4)	6.1-1
		6.2 Repair HTW Leaks in Mechanical Rooms (ECO-5)	6.2-1
		6.3 Repair HHW Leaks in Mechanical Rooms (ECO-6)	6.3-1
		6.4 Repair HTW Leaks in Valve Pits (ECO-7)	6.4-1
		6.5 Distribute HTW from the CEP to the SEP (ECO-10A)	6.5-1
		6.6 Use Leak Locator Equipment (ECO-11)	6.6-1
		6.7 Reduce Operating Pressure to 60 psig (ECO-12B)	6.7-1
	7.0	LOW COST/NO COST PROJECT DOCUMENTATION	
		7.1 Reduce Blowdown (ECO-2)	7.1-1
		7.2 Reduce Soot Blowing (ECO-3)	7.2-1
		7.3 Improve SEP Start-Up Procedure (ECO-9A)	7.3-1
		7.4 Reduce Operating Pressure to 100 psig (ECO-12A)	7.4-1
II	A	APPENDICES	
		A.1 Scope of Work	A.1-1
		A.2 HTW Distribution System Map	A.2-1
		A.3 ECO Energy and Cost Calculations	A.3-1
		A.4 HTW Loss Calculations	A.4-1
		A.5 Energy Data, Boiler Logs and Make-Up Water Data	A.5-1
		A.6 Results of Analysis of HTW and DHW Samples	A.6-1
		A.7 Submittal Review Comments and Review Actions	A.7-1
		A.8 List of Abbreviations and Acronyms	A.8-1
		A.9 Correspondence and Meeting Notes	A.9-1
		A.10 Records Analysis and Site Survey Plan	A.10-1
III	B	FIELD INVESTIGATION FORMS	
		B.1 Valve Pit Valves and Fittings Survey Forms	
		B.2 Mechanical Equipment Room Survey Forms	
		B.3 CEP and SEP Survey Forms	
		B.4 HTW Distribution System Survey Forms	

APPENDIX B FIELD INVESTIGATION FORMS

B.1 VALVE PIT VALVES AND FITTINGS SURVEY FORMS

Valve Pit Zone - Number	HTW Leaks Observed					Sump Pump Repair Required	Pipe/Valve Missing Insulation	Additional Observations and Comments
	Main Valves	Drain Valves	Line Vents	Conduit Vents	HTW Piping			
VB-1-1	N	N	N	N	N	Y	N	
VP-1-1	N	N	N	N	N	Y	N	
VP-1-2	N	N	N	N	N	N	Y	
VP-1-3	N	N	N	N	N	N	N	
VP-1-4	N	N	N	Y	N	Y	N	
VP-1-5	N	N	N	N	N	N	N	
VP-1-6	N	N	N	N	N	Y	Y	
VP-1-7	N	N	N	N	N	N	N	
VP-1-8	N	N	N	N	N	N	N	
VP-1-9	N	N	N	N	N	N	Y	
DP-1-10	N	N	N	N	N	Y	N	
VP-1-10	N	N	N	Y	N	N	Y	
VP-1-11	Y	N	N	N	N	N	N	
VP-1-12	N	N	N	N	N	N	Y	
DP-1-13	N	N	N	Y	N	Y	N	
VP-1-13	N	N	N	Y	N	N	N	Pit leaking
VP-1-14	N	N	N	Y	N	Y	N	
VP-1-15	N	N	N	N	N	N	N	
VP-1-16	N	Y	N	Y	Y	Y	Y	Pit leaking
VP-1-17	N	N	N	Y	N	N	N	
DP-1-17/18	N	N	N	Y	N	Y	N	
VP-1-18	N	N	N	Y	N	N	N	
VP-2N/S-1	N	N	N	N	N	Y	N	
DP-2N-1	N	N	N	N	N	Y	Y	Pit leaking
VP-2N-2	N	N	N	N	N	Y	Y	
VB-2N-1	N	N	N	Y	N	Y	N	
VP-2N-3	N	N	N	N	N	N	N	Pit leaking
VB-2N-2	N	N	N	N	N	N	N	Conduit leaking
VB-2N-3	N	N	N	N	N	Y	N	Pit leaking
VP-2N-4	N	N	N	N	N	Y	N	
VP-2N-5	Y	N	N	N	N	Y	N	
VB-2S-1	N	N	N	N	N	Y	Y	Audible leak
VB-2S-2	N	N	N	N	N	Y	N	Pipes wet
VB-2S-3	N	N	N	N	N	Y	N	Pipes wet
VP-2S-1	N	N	N	N	N	Y	N	
VP-2S-2	N	N	N	N	N	Y	N	
VP-2S-3	Y	N	N	N	N	N	N	
VP-2S-4	N	N	N	N	N	N	N	
VP-2S-5	N	N	N	N	N	N	N	
VP-2S-6	N	N	N	N	N	Y	N	
VP-2S-7	N	N	N	N	N	N	N	
VP-2S-8	Y	N	N	N	N	N	Y	
VP-2S-9	N	N	N	N	N	N	N	
VP-2S-10	N	N	N	N	N	Y	N	
VP-2S-11	N	N	N	N	N	N	N	Elec. problem

Valve Pit Zone - Number	Leaks Observed					Sump Pump Repair Required	Pipe/Valve Missing Insulation	Additional Observations and Comments
	Main Valves	Drain Valves	Line Vents	Conduit Vents	HTW Piping			
VP-3-1	Y	Wet	N	N	N	Y	Y	Wet insulation
VP-3-2	N	N	N	Y	N	Y	N	
VP-3-2A	N	N	Y	Y	N	Y	Y	
VP-3-3	N	N	N	Y	N	N	N	
VP-3-3A	N	N	N	N	N	Y	N	
VP-3-4	N	N	N	N	N	Y	N	Wet insulation
VP-3-5	Y	Wet	N	N	N	Y	N	
VP-3-6	N	N	N	N	N	N	N	
VP-3-7	N	N	N	Y	N	N	N	Two trees in pit
VP-3-8	N	N	N	N	N	N	N	
VP-3-9	N	N	N	Y	N	N	N	
VP-3-10	N	N	N	Y	N	Y	N	Pit leaking
VP-3-11	Y	N	N	Y	N	N	N	Large pit leaks
VP-3-12	N	N	N	Y	N	N	N	Groundwater?
VP-3-13	N	N	N	N	N	Y	N	Groundwater?
VP-3-13A	N	N	N	Y	N	N	N	
VP-3-14	N	N	N	Y	N	N	N	
VP-3-15	Y	N	N	N	N	N	N	
VP-3-16	Y	N	N	N	N	N	Y	
VP-3-16A	N	N	N	N	N	N	N	
VP-3-17	N	N	N	N	N	N	N	
VP-3-18	Y	N	N	N	N	N	Y	
VP-3-19	N	N	N	N	N	Y	N	
VP-3-20	N	N	N	N	N	N	N	
VP-3-21	N	N	N	N	N	N	N	
VP-3-22	N	N	N	N	N	Y	N	
VP-3-23	N	N	N	N	N	Y	Y	
VP-3-24	N	N	N	N	N	Y	Y	
VP-3-24A	N	N	N	N	N	Y	Y	
VP-3-24B	N	N	N	N	N	N	Y	
VP-3-24C	N	N	N	N	N	N	N	
VP-3-25	N	N	N	N	N	N	N	
VP-3-25A	N	N	N	N	N	Y	N	
VP-3-26	N	Wet	N	N	N	Y	N	Wet insulation
VP-3-26A	N	N	N	N	N	Y	N	
VP-3-27	Y	N	N	N	N	Y	Y	
VP-3-28	N	N	N	N	N	N	N	
VP-S-1	N	N	N	N	N	N	N	
VP-S-2	N	N	N	N	N	N	N	
VP-S-3	Y	N	N	N	N	N	N	Steam leak
VP-S-4	N	N	N	N	N	N	N	
VP-S-5	N	N	N	N	N	N	N	
VP-S-6	N	N	N	N	N	N	N	
VP-S-7	N	N	N	N	N	N	N	
VP-S-8	N	N	N	N	N	Y	Y	
VP-S-9	N	N	N	N	N	Y	Y	
VP-S-10	N	N	N	N	N	N	Y	
VP-S-11	N	N	N	N	N	N	Y	Pit leaking
VP-S-12	N	N	N	Y	Y	N	Y	
VP-S-13	N	N	N	Y	N	N	N	

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ☒; 2N ____; 2S ____; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ____; Drain Pit ____; Valve Box ☒
3. Pit/Box Number (VP - #, DP - #, VB - #): VB-1-1
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:

6. Check drain valves and fittings from all HTW mains:

7. Check valves and fittings on HTW line vents:

8. Check for steam flowing from HTW conduit vents:

9. Water level in pit $\approx$ 10 inches. SP not plugged in

10. Other observations or notes:

~ 1" pipes toward SW

- piping submerged, no visible leaks

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ; Valve Box
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-1-1
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
ok
8. Check for steam flowing from HTW conduit vents:
None: SW + SE
Vent from NW is plugged w/ screw plug
9. Water level in pit $\approx$ 1 inches. SP doesnot appear to work
10. Other observations or notes:

INITIALS: ; DATE:

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ; Valve Box
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-1-2
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
OK
8. Check for steam flowing from HTW conduit vents:
None in NE, NW & SE
9. Water level in pit ≈ 0 inches.
10. Other observations or notes:
missing insul: ~ 3" pipe - 1 elbow & 3 LF

INITIALS: ; DATE:

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ; Valve Box
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-1-3
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
NA
8. Check for steam flowing from HTW conduit vents:
None: NE + SW
9. Water level in pit ≈ 0 inches.
10. Other observations or notes:
No lines coming in from NW as shown on map

INITIALS: ; DATE:

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ; Valve Box
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-1-4
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
ok
8. Check for steam flowing from HTW conduit vents:
None: NE, NW + SE
* Slight steam flow + drip from both HTW & UTR vents to SW
9. Water level in pit ≈ -0- inches.
10. Other observations or notes:
- Sump pump on w/no water in pit

INITIALS: ; DATE:

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ; Valve Box
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-1-5
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
ok
8. Check for steam flowing from HTW conduit vents:
None
9. Water level in pit ≈ 0 inches.
10. Other observations or notes:

INITIALS: ; DATE:

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ☒; 2N ____; 2S ____; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-1-6
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:

ok

6. Check drain valves and fittings from all HTW mains:

ok

7. Check valves and fittings on HTW line vents:

NA

8. Check for steam flowing from HTW conduit vents:

None: NE+SW

9. Water level in pit $\approx$ 6 inches. SP not working

10. Other observations or notes:

missing insul: ~1" pipe - 6LF & 2 elbows

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ; Valve Box
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-1-7
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:

ok

6. Check drain valves and fittings from all HTW mains:

ok

7. Check valves and fittings on HTW line vents:

NA

8. Check for steam flowing from HTW conduit vents:

None: NE, NW & SE

9. Water level in pit ≈ 0 inches.
10. Other observations or notes:

INITIALS: ; DATE:

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ; Valve Box
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-1-S
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:

ok

6. Check drain valves and fittings from all HTW mains:

ok

7. Check valves and fittings on HTW line vents:

NA

8. Check for steam flowing from HTW conduit vents:

None; NE + SW

9. Water level in pit ≈ 0 inches.
10. Other observations or notes:

INITIALS: ; DATE:

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ; Valve Box
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-1-9
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:

ok

6. Check drain valves and fittings from all HTW mains:

ok

7. Check valves and fittings on HTW line vents:

NA

8. Check for steam flowing from HTW conduit vents:

None NENone SW

9. Water level in pit ≈ -0- inches.
10. Other observations or notes:

missing insul: 2 valves, ~4" dia pipeINITIALS: ; DATE:

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
2. Type of Pit/Box: Valve Pit ; Drain Pit ✓; Valve Box
3. Pit/Box Number (VP - #, DP - #, VB - #): DD-1-10
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
NA
6. Check drain valves and fittings from all HTW mains:
NA
7. Check valves and fittings on HTW line vents:
NA
8. Check for steam flowing from HTW conduit vents:
None
9. Water level in pit ≈ 4 inches. SP not working
10. Other observations or notes:

INITIALS: ; DATE:

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ; Valve Box
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-1-10
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
ok
8. Check for steam flowing from HTW conduit vents:
slight steam flow from HTWR vent to SE
9. Water level in pit $\approx$ 1/2 inches.
10. Other observations or notes:
missing insulation; ~8" pipe - 1 elbow

INITIALS: ; DATE:

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ; Valve Box
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-1-11
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
* Valve stem looking ok / see from valve to NW *
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
ok
8. Check for steam flowing from HTW conduit vents:
None : NE, NW, SE, SW
9. Water level in pit ≈ -0- inches.
10. Other observations or notes:
also has small pipes HTW S+R to NW

INITIALS: ; DATE:

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ; Valve Box
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-1-12
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
ok
8. Check for steam flowing from HTW conduit vents:
None; NE, NW, SE & SW
9. Water level in pit ≈ -0- inches.
10. Other observations or notes:
insul missing: ~2" pipe - ~6LF toward NE

also has ~2" LHD sep toward NE (Ent. Ltr.)

INITIALS: ; DATE:

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ☒; 2N ____; 2S ____; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ____; Drain Pit ☒; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): DP-1-13
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
NA

6. Check drain valves and fittings from all HTW mains:
NA

7. Check valves and fittings on HTW line vents:
NA

8. Check for steam flowing from HTW conduit vents:
Slight steam flow from vent - could be due to
conduit being 1/2 submerged

9. Water level in pit $\approx$ 10 inches. Spout working
10. Other observations or notes:

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ; Valve Box
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-1-12
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:

ok

6. Check drain valves and fittings from all HTW mains:

ok

7. Check valves and fittings on HTW line vents:

ok

8. Check for steam flowing from HTW conduit vents:

- None: NW & SE- Slight steam flow + drip from SW vent (to bridge)

9. Water level in pit $\approx$ $\frac{1}{2}$ inches.

10. Other observations or notes:

drips (steady) from SW vent + GW or HTW?!INITIALS: ; DATE:

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ; Valve Box
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-1-14
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
NA
8. Check for steam flowing from HTW conduit vents:
— None: NE, SE + SW
— slight steam flow from NW vent (pipe on S. side)
9. Water level in pit ≈ 2 inches. sp not working
10. Other observations or notes:

INITIALS: ; DATE:

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ; Valve Box
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-1-15
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
NA
8. Check for steam flowing from HTW conduit vents:
None: NE & SW
9. Water level in pit ≈ 0 inches.
10. Other observations or notes:

INITIALS: ; DATE:

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 /; 2N ; 2S ; 3 ; SEP
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ✓; Valve Box
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-1-16
4. Mark location of pit/box and indicate pit/box number on site map. ✓

5. Check valve stems, flanges and fittings at all HTW mains:

* Value stem leaking steam and ~2-3 drops/sec HTW on
HTW branch line (may be drain pipe)

*

6. Check drain valves and fittings from all HTW mains:

7. Check valves and fittings on HTW line vents:

OK

8. Check for steam flowing from HTW conduit vents:

Light steam from vent to NE (toward main HTW lines) same pipe
that has leaking drain valve mentioned above.

- Also has water leaking from conduit pipe entrance (maybe GW) ~2 drops/sec

9. Water level in pit ≈ 3 inches. SP not working
10. Other observations or notes:

- missing insul: ~1" pipe - ~6 LF

INITIALS: ; DATE:

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ; Valve Box
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-1-17
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:

ok

6. Check drain valves and fittings from all HTW mains:

ok

7. Check valves and fittings on HTW line vents:

ok

8. Check for steam flowing from HTW conduit vents:

* ^{fair amount of} Steam from conduit vent to NE

None: SE & SW

9. Water level in pit ≈ 0 inches.
10. Other observations or notes:

INITIALS: ; DATE:

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ☒; 2N ____; 2S ____; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ____; Drain Pit ☒; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): DP-1-17/13
4. Mark location of pit/box and indicate pit/box number on site map.
5. Check valve stems, flanges and fittings at all HTW mains:
NA

6. Check drain valves and fittings from all HTW mains:
* HTW/Steam Flowing from conduit vent to NE

7. Check valves and fittings on HTW line vents:
NA

8. Check for steam flowing from HTW conduit vents:
NA

9. Water level in pit $\approx$ 12 inches. SP not working
10. Other observations or notes:

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ☒; 2N ____; 2S ____; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): 1P-1-13
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
ok
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
ok
8. Check for steam flowing from HTW conduit vents:
None; NE, NW, & SE - Nov '95
SE = drip + steam flow - Jan '96
9. Water level in pit $\approx$ -0- inches.
10. Other observations or notes:
- Dead grass next to NE side of bldg B16
- Surface temp. (~3-4" down) is 83°F, other
areas of ground are ~67°F. Temp. in crack
of sidewalk was 90°F.

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ☒; 2S ☒; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-2113-1
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
OK
6. Check drain valves and fittings from all HTW mains:
OK
7. Check valves and fittings on HTW line vents:
OK
8. Check for steam flowing from HTW conduit vents:
None North
None South
None main from plant
9. Water level in pit $\approx$ 6 inches. sump pump not working
10. Other observations or notes:
~5 drops/sec from South supply/return conduit?
~1 drop/7 sec from North, " " " } probably ground water

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ✓; 2S ____; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ____; Drain Pit ✓; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): DP-2N-1
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
None Northwest
None South east
None North east
9. Water level in pit $\approx$ 3 inches. SP not working
10. Other observations or notes:
- Not shown on map - ~~has~~ also has ~ 2' HTW
supply & return to the north east.
- Some insulation missing ~ 4 LF
- Steady flow of water ~ 0.25 gpm from conduit of NW pipe
could be groundwater, pit is near drain pipe

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ✓; 2S ____; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-7N-2
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:

ok

6. Check drain valves and fittings from all HTW mains:

ok

7. Check valves and fittings on HTW line vents:

ok

8. Check for steam flowing from HTW conduit vents:

None NW

" SE

" SW

9. Water level in pit $\approx$ 4 inches. SP not working

10. Other observations or notes:

- $\sim 1\frac{1}{2}$ " HTW S+R lines to South. West

- insulation missing $\sim 5'$

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ☒; 2S ____; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ____; Drain Pit ____; Valve Box ☒
3. Pit/Box Number (VP - #, DP - #, VB - #): VB-2N-1
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
ok
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
ok
8. Check for steam flowing from HTW conduit vents:
NW vent is hot w/ very light ^{steam flow} - Not visible
SE " " cold no flow
9. Water level in pit $\approx$ 24 inches. Sp not working
10. Other observations or notes:
also has ^{HTW} S+R lines to SW

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ☒; 2S ____; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-2A-3
4. Mark location of pit/box and indicate pit/box number on site map.
5. Check valve stems, flanges and fittings at all HTW mains:

ok

6. Check drain valves and fittings from all HTW mains:

ok

7. Check valves and fittings on HTW line vents:

ok

8. Check for steam flowing from HTW conduit vents:

None NW" SE" SW

9. Water level in pit $\approx$ -0- inches.

10. Other observations or notes: ground water

* ~1 drop/sec & audible leak sound near SE conduit
steam/HTW

Pit is near drainage ditch

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ✓; 2S ____; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ____; Valve Box ✓
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-2N-2
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok
No valves on mains so called this a valve box
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
ok
8. Check for steam flowing from HTW conduit vents:
None: NW, SE, SW, NE
9. Water level in pit ≈ -0- inches.
10. Other observations or notes:
~ 1 drop/sec from NW conduit

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ✓; 2S ____; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ____; Drain Pit ✓; Valve Box ✓
3. Pit/Box Number (VP - #, DP - #, VB - #): VB/DP-2N-3
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok
No valves on mains. Air baffles on mains
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
ok
8. Check for steam flowing from HTW conduit vents:
None = NW & SE
Vent to NE conduit has screw plug in it
9. Water level in pit ≈ 8 inches. sp not working
10. Other observations or notes:
→ ground leak from around conduit entrance to pit NW + NE
very slow drip from each
Pit in drainage ditch

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ✓; 2S ____; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ____; Valve Box ✓
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-2N-4
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
None : SE, SW + NE

9. Water level in pit ≈ 12 inches. sp not working
10. Other observations or notes:
very slight ground water leak around SW conduit

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ☒; 2S ____; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-2N-5
4. Mark location of pit/box and indicate pit/box number on site map.
5. Check valve stems, flanges and fittings at all HTW mains:



HTW/steam leaking from valve on main^{line} to NW
distribution line (to bldg 1840) - leak can be
seen and heard



6. Check drain valves and fittings from all HTW mains:

ok

7. Check valves and fittings on HTW line vents:

ok

8. Check for steam flowing from HTW conduit vents:

None : SW, NE, NW

9. Water level in pit $\approx$ 6 inches. SP not working

10. Other observations or notes:

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ✓; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ____; Drain Pit ____; Valve Box ✓
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-25-1
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:

ok

6. Check drain valves and fittings from all HTW mains:

ok

7. Check valves and fittings on HTW line vents:

ok

8. Check for steam flowing from HTW conduit vents:

None - NE & SW

9. Water level in pit $\approx$ 1 inches. sp not working - motor running but no flow

10. Other observations or notes:

- ~~the~~ contains $\sim 1\frac{1}{2}$ " HTW toward SW

- Ground water dripping from around conduit to NE

- insulation missing $\sim 5'$, insulation soaked $\sim 6'$

- Audible steam leaking, sound could not find

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ____; Drain Pit ____; Valve Box ____ ?
3. Pit/Box Number (VP - #, DP - #, VB - #): ____ ?
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:

6. Check drain valves and fittings from all HTW mains:

7. Check valves and fittings on HTW line vents:

8. Check for steam flowing from HTW conduit vents:

9. Water level in pit $\approx$ ____ inches.
10. Other observations or notes:
Pit covered w/ solid metal cover and staked off

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ✓; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ____; Drain Pit ____; Valve Box ✓
3. Pit/Box Number (VP - #, DP - #, VB - #): VB-72-2
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:

6. Check drain valves and fittings from all HTW mains:

7. Check valves and fittings on HTW line vents:

8. Check for steam flowing from HTW conduit vents:

None from NW (only vent)

9. Water level in pit ≈ 13 inches. Spot working

10. Other observations or notes:

~ Small HTW pipe to NW is only pipe visible
through water, every thing in pit is submerged

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ✓; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ____; Drain Pit ____; Valve Box ✓
3. Pit/Box Number (VP - #, DP - #, VB - #): VB-25-3
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:

6. Check drain valves and fittings from all HTW mains:

7. Check valves and fittings on HTW line vents:

8. Check for steam flowing from HTW conduit vents:

None from NW

9. Water level in pit ≈ 18 inches. SP not working

10. Other observations or notes:

- Same notes as VB-25-2

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ✓; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-2S-1
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:

ok

6. Check drain valves and fittings from all HTW mains:

ok

7. Check valves and fittings on HTW line vents:

ok

8. Check for steam flowing from HTW conduit vents:

None : SW (vent line is hot)SENW (vent line is hot)

9. Water level in pit ≈ 4 inches. SR not working
10. Other observations or notes:

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ✓; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ____; Valve Box ✓
3. Pit/Box Number (VP - #, DP - #, VB - #): VP/VE-25-2
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
None : NE
NW
SE

9. Water level in pit ≈ 4 inches. Sump pump level arm is set too high
10. Other observations or notes:

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ✓; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ____; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-25-3
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
very slight audible leak from valve stems *
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
ok
8. Check for steam flowing from HTW conduit vents:
None - NE, NW, SE, SW
9. Water level in pit ≈ 0 inches.
10. Other observations or notes:

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-25-4
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
None: NW, NE, SW, SE

9. Water level in pit $\approx$ 10 inches.
10. Other observations or notes:

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ____; Drain Pit ____; Valve Box ☒
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-21-5
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
None: NE, SW, NW

9. Water level in pit $\approx$ -0- inches.
10. Other observations or notes:

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-2S-6
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
~~ok~~ NONE: NE, NW, SE

9. Water level in pit $\approx$ 3 inches. SP not working
10. Other observations or notes:
very slight and note steam looks may be water flowing

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-2S-7
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
None : FINE , WSW

9. Water level in pit $\approx$ -0 inches.
10. Other observations or notes:

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-25-3
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
* Valve stems leaking steam (very slight) on both *
HTW supply and return main valves
6. Check drain valves and fittings from all HTW mains:
OK
7. Check valves and fittings on HTW line vents:
OK
8. Check for steam flowing from HTW conduit vents:
None NE
None SW
NW vent line is capped w/ screw plug
9. Water level in pit $\approx$ -0- inches.
10. Other observations or notes:
- has another $\sim 1\frac{1}{4}$ S+R lines toward NW
- insulation missing on $\sim 2'$ of lines to NW

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-75-9
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
None: NE, NW, SE, SW

9. Water level in pit $\approx$ -0- inches.
10. Other observations or notes:

also has HTW s&r toward the SW (~2" dia)

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-2S-10
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
ok
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
ok
8. Check for steam flowing from HTW conduit vents:
None; NW, NE, SW, SE
9. Water level in pit $\approx$ 12 inches. Sp not working
10. Other observations or notes:
also has HTW s&r lines to the NW

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ✓; 3 ____; SEP ____
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-25-11
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:

ok

6. Check drain valves and fittings from all HTW mains:

ok

7. Check valves and fittings on HTW line vents:

ok

8. Check for steam flowing from HTW conduit vents:

None: NW

None: SW

9. Water level in pit $\approx$ -0- inches.
10. Other observations or notes:

Electrical conduit for sump pump is broken where it enters
the valve pit. Metal pit cover grating is rubbing
against the electrical wire and scraping off the
insulation. Shock hazard and should be fixed ASAP.

I put in work order at DPW.

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-1
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
* Steam/HTW leak around insulation of HTW main valve.
Equiv. to small stream of water. Biggest leak seen yet. *
6. Check drain valves and fittings from all HTW mains:
some ok
some under water
7. Check valves and fittings on HTW line vents:
KRA ok
8. Check for steam flowing from HTW conduit vents:
NF - None
SE - "
SW - "
9. Water level in pit $\approx$ 12 inches. SP not plugged in
10. Other observations or notes:
- missing insulation: 3 elbows + 2 LF
- some insulation under water

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-2-2
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
* NW - slight drip + vent pipe is hot (sw pipe)
SE - None

9. Water level in pit $\approx$ 18+ inches. Sump Pump is on top of pit cover.
10. Other observations or notes:

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-2A
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
ok
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
ok
* 1/17/96 slight steam flow from base of HTW^{SW} line vent (NW pipe)
8. Check for steam flowing from HTW conduit vents:
* SW - steady flow from vent of NW pipe (from mains)
NE - vent closed w/ screen plug
9. Water level in pit $\approx$ 18+ inches.
10. Other observations or notes:
missing insul.: 1 valve, 1 45° elbow ~3" pipe

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-3
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
* NW - steam flow (small) from CV of SW pipe
SW - None
SE - "

9. Water level in pit $\approx$ 0 inches.
10. Other observations or notes:

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-3A
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:

OK

6. Check drain valves and fittings from all HTW mains:

NA

7. Check valves and fittings on HTW line vents:

NA

8. Check for steam flowing from HTW conduit vents:

NA

9. Water level in pit $\approx$ 12 inches. SP not working

10. Other observations or notes:

- Pit not on map

- stub outs only - for future use

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-4
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
NA

8. Check for steam flowing from HTW conduit vents:
NE - ok
SE - closed w/ screw plug

9. Water level in pit $\approx$ 12 inches. SP not working.
10. Other observations or notes:
1 HTW pipe 1/2 way under water

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-5
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:

— mains ok

* — Valve stem to stick out headed NW is leaking HTW
at ~ 1 drop / 10 sec + a little steam *

6. Check drain valves and fittings from all HTW mains:

some ok

some under water

7. Check valves and fittings on HTW line vents:

OK

8. Check for steam flowing from HTW conduit vents:

SW - None

SE - |

NE - ✓

9. Water level in pit ≈ 12 inches.
10. Other observations or notes:

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-6
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
NA

8. Check for steam flowing from HTW conduit vents:
NW - NONE
SE - "
NE - "

9. Water level in pit $\approx$ 6 inches.
10. Other observations or notes:
Pit is not where shown on map - see markup

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-7
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
NA

8. Check for steam flowing from HTW conduit vents:
SW - ok

- * SE - very light flow and occasional drip from
both HTW conduits heading SE

9. Water level in pit $\approx$ 0 inches.
10. Other observations or notes:
2 trees growing in pit

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-3
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:

ok

6. Check drain valves and fittings from all HTW mains:

ok

7. Check valves and fittings on HTW line vents:

NA

8. Check for steam flowing from HTW conduit vents:

SW - NoneSE - 11

9. Water level in pit $\approx$ -2- inches.
10. Other observations or notes:

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ✓; SEP ____
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-9
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:

ok

6. Check drain valves and fittings from all HTW mains:

ok

7. Check valves and fittings on HTW line vents:

ok

8. Check for steam flowing from HTW conduit vents:

S - smaller amount of steam flow from eastern most pipe

E - steady steam flow from ^{southern most} pipe

9. Water level in pit $\approx$ 0 inches.

10. Other observations or notes:

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ✓; SEP ____
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-10
4. Mark location of pit/box and indicate pit/box number on site map.
5. Check valve stems, flanges and fittings at all HTW mains:

ok

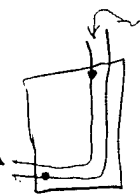
6. Check drain valves and fittings from all HTW mains:

ok

7. Check valves and fittings on HTW line vents:

NA

8. Check for steam flowing from HTW conduit vents:

*W - small steam flow from southern most pipeN - steady flow & steam occ. drip from western most pipe

9. Water level in pit $\approx$ 4 inches. SP works - adj. level control

10. Other observations or notes:

*

Steady stream of water leaking into pit from around
conduit at North end of pit - can not tell if it is HTW
or ground water. $\sim 1/4$ gal/min.

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-114. Mark location of pit/box and indicate pit/box number on site map. ☒

5. Check valve stems, flanges and fittings at all HTW mains:

* - steam flowing from main valve of northern pipe at
east wall of pit - equiv. to ~ 1/8" stream of water. *

6. Check drain valves and fittings from all HTW mains:

ok

7. Check valves and fittings on HTW line vents:

NA

8. Check for steam flowing from HTW conduit vents:

W - steady flow from both ventsE - slight flow from vent of southern pipe9. Water level in pit $\approx$ 1/2 inches. SP works

10. Other observations or notes:

* About ~~1~~ 1 gpm water is flowing into pit from around both
conduits at east end of pit. Flow may be higher - ground
is soaked & there are puddles from the sump pump drain pipe

INITIALS: ____; DATE: ____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ✓; SEP ____
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-12
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
None N and E
✗ Fair amount of steam flow from west vent (of south pipe)

9. Water level in pit ≈ 0 inches.
10. Other observations or notes:

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ✓; SEP ____
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-13
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
NA
8. Check for steam flowing from HTW conduit vents:
None NE & SW
9. Water level in pit $\approx$ 2 inches. Sp not working
10. Other observations or notes:
- was leak fixed near here?
- pipe temp on outside $\sim 90^{\circ}\text{F}$ and 125°F
- ground surface temp. at exp. loop near hear is $\sim 88^{\circ}\text{F}$

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ✓; SEP ____
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-13A
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
NA

8. Check for steam flowing from HTW conduit vents:
occasional slight steam flow from SW vent (pipe toward SE)

9. Water level in pit ≈ 0 inches.
10. Other observations or notes:
- all chw + htw pipes enter from SW + leave from SE
- was tank fixed here?
- pipe temps at outside of vent:

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-14
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
* Steam flow and drips from ^{both} NW vents (~1 drop / 7-10 secs (slightly more from NE vent))
None from SE vents

9. Water level in pit $\approx$ 0 inches.
10. Other observations or notes:

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ✓; SEP ____
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-15
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
* Flange of HTWR valve from is leaking. Steam equivalent
to very small continuous stream of HTW *
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
ok
8. Check for steam flowing from HTW conduit vents:
NW - None
NE - "
SW - "
9. Water level in pit $\approx$ 0 inches.
10. Other observations or notes:

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-16
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
* flange leaking at HTW main valve (pipe toward E). Leaking
to small continuous stream of water for 2x more than valve VP-345 *
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
ok
8. Check for steam flowing from HTW conduit vents:
None E + W
9. Water level in pit $\approx$ 0 inches.
10. Other observations or notes:
Missing insulation on same valve it is leaking

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-2-15A
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
N - NO conduit vent
S - None
W - None

9. Water level in pit $\approx$ 0 inches.
10. Other observations or notes:

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-17
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:

ok

6. Check drain valves and fittings from all HTW mains:

ok

7. Check valves and fittings on HTW line vents:

ok

8. Check for steam flowing from HTW conduit vents:

E - None

9. Water level in pit $\approx$ 0 inches.

10. Other observations or notes:

stub out only, no end user yet

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ✓; SEP ____
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): vp-3-1B
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
* Flange on ^{HTWR} valve from South is leaking. Est. steam equiv. to ~ 1 drop/sec. *
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
ok
8. Check for steam flowing from HTW conduit vents:
None - W, E + S
9. Water level in pit ≈ 0 inches.
10. Other observations or notes:
missing insulation: same valve that is leaking

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-19
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
ok
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
ok
8. Check for steam flowing from HTW conduit vents:
None N, S, E + W
9. Water level in pit $\approx$ 3 inches. SP not working. Adj. or change float
10. Other observations or notes:
HTW S+E 4" N, S, E+W - diff. than shown on map

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ✓; SEP ____
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-20
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
None N+S

9. Water level in pit ≈ 0 inches.
10. Other observations or notes:

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-21
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
None S + W

9. Water level in pit $\approx$ 0 inches.
10. Other observations or notes:
* leaking sound from Mech. equip room of bldg
224.

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ✓; SEP ____
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-22
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok
~~DP~~

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
N - None
S - "
W - "

9. Water level in pit ≈ 2 inches. SP not working
10. Other observations or notes:

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-23
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
NA

8. Check for steam flowing from HTW conduit vents:
NE - Vent closed w/ screw plug
NW - None
SW - None

9. Water level in pit $\approx$ 3 inches. *sump pump not working - motor cycles on (~1 sec) + off (~30 sec) - water is pumped.*
10. Other observations or notes:
- insul missing: 1 elbow, 2 valves + ~ 3LF of pipe

- pipes from NE, NW + SW - diff. flow plan

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ✓; SEP ____
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-24
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:

ok

6. Check drain valves and fittings from all HTW mains:

ok

7. Check valves and fittings on HTW line vents:

ok

8. Check for steam flowing from HTW conduit vents:

SE - NoneNE - "

9. Water level in pit ≈ 1 inches. adj. Float?
10. Other observations or notes:

insul. missing from 1 main Valve

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ✓; SEP ____
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-24A
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
SE - None
NW - None
SW - None

9. Water level in pit ≈ 1 inches.
10. Other observations or notes:
- This pit is not on map

- missing insul: Main HTW line - 1 elbow + 1 valve

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ✓; SEP ____
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-24B
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
NW - None
NE - "
SW - "

9. Water level in pit ≈ 0 inches.
10. Other observations or notes:
- missing insul on 2 valves ~ 3" pipe

- This pit not on map.

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-24C
4. Mark location of pit/box and indicate pit/box number on site map.
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
NW - None

9. Water level in pit $\approx$ 0 inches.
10. Other observations or notes:

- This pit not on map

- stub outs only for future use

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ✓; SEP ____
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-25
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:

ok

6. Check drain valves and fittings from all HTW mains:

ok

7. Check valves and fittings on HTW line vents:

ok

8. Check for steam flowing from HTW conduit vents:

SW - None

9. Water level in pit ≈ 0 inches.

10. Other observations or notes:

Sub outs only - For future use

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-25A
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
NW - None
SE - "

9. Water level in pit $\approx$ 1/2 inches. adj. float on SP
10. Other observations or notes:
this pit not on map

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ✓; SEP ____
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-26
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:

OK

6. Check drain valves and fittings from all HTW mains:

two OK

two are under water

7. Check valves and fittings on HTW line vents:

NA

8. Check for steam flowing from HTW conduit vents:

SE - None

NW - "

9. Water level in pit ≈ 18 inches. SP not working.
10. Other observations or notes:

Some insul soaked due to high water level

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ✓; SEP ____
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-26A
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
NE - None
SW - None

9. Water level in pit ≈ 1 inches. adj. SP Float?
10. Other observations or notes:
This pit not on map

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-27
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:

* ~ 1 drop/sec is coming from insulation around HTW
main valve near SW rail fit, also slight visible
steam from the same area

*
6. Check drain valves and fittings from all HTW mains:
OK
7. Check valves and fittings on HTW line vents:
NA
8. Check for steam flowing from HTW conduit vents:
SE - None
SW - None
9. Water level in pit $\approx$ 10 inches. No sump pump or piping for sp
10. Other observations or notes:
Insul. missing: 1 valve + 1 elbow of main

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ✓; SEP ____
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): vp-3-28
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
N - None
S - "
W - "

9. Water level in pit ≈ 0 inches.
10. Other observations or notes:

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ____; SEP ☒
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ☒; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP/DP-5-5
4. Mark location of pit/box and indicate pit/box number on site map.
5. Check valve stems, flanges and fittings at all HTW mains:
NA

6. Check drain valves and fittings from all HTW mains:

7. Check valves and fittings on HTW line vents:

8. Check for steam flowing from HTW conduit vents:
None

9. Water level in pit $\approx$ ____ inches.
10. Other observations or notes:
No valves on mains

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ____; SEP ☒
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ☒; Valve Box ☒
3. Pit/Box Number (VP - #, DP - #, VB - #): VP/DP-56
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all ^{steam} HTW mains:
no steam valves: ok
6. Check drain valves and fittings from all ^{steam} HTW mains:
ok
7. Check valves and fittings on ^{steam} HTW line vents:
ok
8. Check for steam flowing from HTW conduit vents:
None: NE & SW
9. Water level in pit $\approx$ 0 inches.
10. Other observations or notes:

No valve on steam main

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ____; SEP ☒
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-S-7
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:

ok

6. Check drain valves and fittings from all HTW mains:

ok

7. Check valves and fittings on HTW line vents:

ok

8. Check for steam flowing from HTW conduit vents:

None - NW

9. Water level in pit $\approx$ -0- inches.

10. Other observations or notes:

HTW not used, only stub out for future use

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ____; SEP ☒
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
ok
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
ok
8. Check for steam flowing from HTW conduit vents:
None: NE & NW
9. Water level in pit $\approx$ -0- inches.
10. Other observations or notes:
- sump pump on w/ no water in pit - adj. level controls
- missing insul: 9" pipe - 1 valve
" " : 4" pipe - 1 valve

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ____; SEP /
2. Type of Pit/Box: Valve Pit /; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-5-9
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok
6. Check drain valves and fittings from all HTW mains:
ok
7. Check valves and fittings on HTW line vents:
ok
8. Check for steam flowing from HTW conduit vents:
None: NW + SE
9. Water level in pit ≈ -0- inches.
10. Other observations or notes:
- missing insul: ~5" pipe - 1 flange & 1 valve
- Sump pump running with little, or no water in pit - adj. level control

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ____; SEP ✓
2. Type of Pit/Box: Valve Pit ✓; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-3-10
4. Mark location of pit/box and indicate pit/box number on site map. ✓
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
None NW
None SE
SW (to bldg 3022) vent is capped w/ screw plug
9. Water level in pit ≈ -0- inches.
10. Other observations or notes:
- missing insul: 6" pipe; 2 valves; 110th

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ____; SEP ☒
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-5-11
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
None : NW, NE, SW, SE

9. Water level in pit $\approx$ -0- inches.
10. Other observations or notes:
- missing insulation: 1 1/2" pipe: 3 flanges, 1 valve, ~ 5 LF
6" " : 1 valve

- groundwater seeping from ^{around} SW + NE conduit

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ____; SEP ☒
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-5-12
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:
ok

6. Check drain valves and fittings from all HTW mains:
ok

7. Check valves and fittings on HTW line vents:
ok

8. Check for steam flowing from HTW conduit vents:
light steam-flow and drip from NW vent ^{1/15 sec}
None : NE & SE

9. Water level in pit $\approx$ -0- inches.
10. Other observations or notes:
missing insulation on ~ 7 ft of pipe w/ 2 valves + 2 flanges

INITIALS: _____; DATE: _____

VALVES & FITTINGS SURVEY

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ____; SEP ☒
2. Type of Pit/Box: Valve Pit ☒; Drain Pit ____; Valve Box ____
3. Pit/Box Number (VP - #, DP - #, VB - #): VP-2-13
4. Mark location of pit/box and indicate pit/box number on site map. ☒
5. Check valve stems, flanges and fittings at all HTW mains:

ok

6. Check drain valves and fittings from all HTW mains:

ok

7. Check valves and fittings on HTW line vents:

ok

8. Check for steam flowing from HTW conduit vents:

None: SE, SW

9. Water level in pit $\approx$ -0- inches.
10. Other observations or notes:

INITIALS: _____; DATE: _____

B.2 MECHANICAL EQUIPMENT ROOM SURVEY FORMS

HTW Study

Mechanical Rooms Survey - Summary

Fort Stewart

Building No.	HTW Zone	Building Type	DHW Temp.	Water Sample	Mech Rm Survey	HTW Leaks	Other Leaks
206	3	Learning Center	80	DHW	Y	Y	Y
207	3	Dining Facility	124	DHW	Y	N	N
208	3	Fitness Center	113	DHW	Y	Y	N
211	3	Admin.	N/A	N/A	Y	Y	N
212	3	Admin/Barracks	131	DHW	Y	N	N
213	3	Barracks	120	DHW	Y	N	N
215	3	Barracks	137	DHW	Y	Y	N
216	3	Barracks	110	DHW	Y	Y	N
217	3	Admin.	N/A	N/A	Y	Y	N
218	3	Barracks	124	DHW	Y	N	Y
223	3	Admin.	N/A	N/A	Y	Y	N
224	3	Admin.	N/A	N/A	Y	Y	N
225	3	Admin.	N/A	N/A	Y	N	N
230	3	Tac Equip Shop	N/A	N/A	Y	N	N
241	3	Tac Equip Shop	N/A	N/A	Y	N	N
260	3	Tac Equip Shop	N/A	N/A	Y	N	N
270	3	Tac Equip Shop	N/A	N/A	Y	Y	N
276	3	Tac Equip Shop	N/A	N/A	N		
302	3	Hospital	137	DHW	Y	N	N
403	N/A	Child Care Ctr	N/A	N/A	Y	N/A	N
439	N/A	Fitness Center	139	DHW	Y	N/A	N
440	2	Dental Clinic	114	DHW	Y	N	N
501	2	Barracks	134	DHW	Y	Y	N
503	2	Barracks	122	DHW	Y	Y	N
504	2	Barracks	158	DHW	Y	Y	N
506	2	Admin.	N/A	N/A	Y	N	N
507	2	Admin.	N/A	N/A	Y	Y	N
508	2	Admin.	N/A	N/A	Y	N	N
509	2	Admin.	N/A	N/A	Y	N	Y
512	2	Dining Facility	145	DHW	Y	?	Y
514	2	Barracks	126	DHW	Y	Y	N
515	2	Barracks	123	DHW	Y	N	Y
516	2	Barracks	145	DHW	Y	?	Y
517	2	Barracks	175	DHW	LOCKED		
518	2	Barracks	183	DHW	Y	?	Y
520	2	Admin.	N/A	N/A	Y	N	Y
521	2	Admin.	N/A	N/A	Y	Y	N
522	2	Admin.	N/A	N/A	Y	Y	N
523	2	Admin.	N/A	N/A	Y	N	N
524	2	Admin.	N/A	N/A	Y	N	N
525	2	Admin.	N/A	N/A	Y	Y	N

Building No.	HTW Zone	Building Type	DHW Temp.	Water Sample	Mech Rm Survey	HTW Leaks	Other Leaks
608	2	Fitness Center	127	DHW	Y	Y	N
610	2	Chapel	115	DHW	Y	N	N
612	2	Admin.	N/A	N/A	Y	Y	Y
614	1	Admin.	N/A	N/A	Y	N	Y
616	1	Admin.	N/A	N/A	Y	N	Y
617	1	Admin.	N/A	N/A	Y	N	N
618	1	Admin.	N/A	N/A	Y	N	N
619	1	Admin.	N/A	N/A	Y	N	N
620	1	Admin.	112	DHW	Y	N	N
621	1	Admin.	91	DHW	Y	N	N
622	1	Admin.	85	DHW	Y	N	N
623	1	Admin.	109	DHW	Y	N	Y
624	1	Admin.	109	DHW	Y	N	Y
626	1	Dining Facility	145	DHW	Y	N	N
628	1	Admin.	N/A	N/A	Y	Y	N
629	1	Barracks	160	DHW	Y	?	Y
630	1	Barracks	117	DHW	Y	N	Y
631	1	Barracks	142	DHW	Y	Y	Y
632	1	Barracks	160	DHW	Y	N	Y
633	1	Barracks	128	DHW	Y	Y	Y
634	1	Barracks	LOCKED	LOCKED	Y	N	N
635	1	Barracks	140	DHW	Y	Y	N
636	1	Barracks	138	DHW	Y	Y	Y
637	1	Barracks	158	DHW	Y	N	N
638	1	Admin.	N/A	N/A	Y	N	Y
639	1	Admin.	N/A	N/A	Y	Y	N
640	1	Admin.	N/A	N/A	Y	N	N
641	1	Admin.	N/A	N/A	Y	N	N
642	1	Dining Facility	154	DHW	Y	N	Y
643	1	Admin.	N/A	N/A	Y	Y	N
644	1	Admin.	N/A	N/A	Y	Y	N
645	1	Admin.	N/A	N/A	Y	N	N
646	1	Admin.	N/A	N/A	Y	N	N
647	1	Admin.	N/A	N/A	Y	Y	N
648	1	Admin.	N/A	N/A	Y	N	Y
649	1	Admin.	N/A	N/A	Y	N	N

HTW Study

Mechanical Rooms Survey - Summary

Fort Stewart

Building No.	HTW Zone	Building Type	DHW Temp.	Water Sample	Mech Rm Survey	HTW Leaks	Other Leaks
701	1	Health Clinic	152	DHW	Y	Y	N
702	1	Ent. Center	143	DHW	Y	N	N
703	1	Enl. Mens Club	N/A	N/A	LOCKED		Y
704	1	Theater	N/A	N/A	Y	N	Y
706	1	Branch Exchange	N/A	N/A	Y	N	Y
708	1	Fitness Center	131	DHW	Y	N	Y
710	1	Admin.	N/A	N/A	Y	N	Y
712	1	Barracks	135	DHW	Y	N	Y
713	1	Barracks	133	DHW	Y	N	Y
714	1	Barracks	137	DHW	Y	N	Y
715	1	Barracks	135	DHW	Y	Y	N
717	1	Barracks	131	DHW	Y	N	N
718	1	Barracks	124	DHW	Y	Y	Y
719	1	Barracks	112	DHW	Y	Y	N
720	1	Barracks	130	DHW	Y	N	Y
721	1	Admin.	N/A	N/A	Y	N	N
722	1	Admin.	N/A	N/A	Y	Y	Y
723	1	Admin.	N/A	N/A	Y	N	N
724	1	Admin.	N/A	N/A	Y	N	N
725	1	Admin.	N/A	N/A	Y	N	N
726	1	Dining Facility	158	DHW	Y	N	Y
727	N/A	Training Facility	N/A	N/A	Y	N/A	N
728	1	Admin.	N/A	N/A	Y	Y	N
810	1	Barracks	131	DHW	Y	N	N
811	1	Admin.	N/A	N/A	Y	N	N
812	1	Admin.	N/A	N/A	Y	N	N
813	1	Admin.	N/A	N/A	Y	N	N
814	1	Admin.	N/A	N/A	Y	N	Y
815	1	Admin.	N/A	N/A	Y	N	N
816	1	Admin.	N/A	N/A	Y	N	Y
818	1	Admin.	N/A	N/A	Y	N	N
819	1	Admin.	N/A	N/A	Y	Y	N

HTW Study

Mechanical Rooms Survey - Summary

Fort Stewart

Building No.	HTW Zone	Building Type	DHW Temp.	Water Sample	Mech Rm Survey	HTW Leaks	Other Leaks
1160	3	D.S. Maint Fac	N/A	N/A	Y	Y	N
1170	3	G.S. Maint Fac	N/A	N/A	Y	N	N
1208	1	Tac Equip Shop	N/A	N/A	Y	N	Y
1209	1	Tac Equip Shop	N/A	N/A	Y	N	N
1211	1	Tac Equip Shop	N/A	N/A	Y	N	N
1245	N/A	Tac Equip Shop	N/A	N/A	Y	N/A	Y
1259	1	Tac Equip Shop	N/A	N/A	Y	Y	N
1261	2	Tac Equip Shop	N/A	N/A	N		
1265	2	Tac Equip Shop	N/A	N/A	Y	N	N
1280	N/A	Tac Equip Shop	N/A	N/A	Y	N/A	Y
1320	2	Tac Equip Shop	N/A	N/A	Y	N	N
1330	2	Tac Equip Shop	N/A	N/A	Y	Y	N
1340	2	Tac Equip Shop	N/A	N/A	Y	N	N
1412		C. Energy Plant	N/A	HTW	Y	Y	
1500	3	Div Logis Fac	N/A	N/A	w/ 1509?		
1503	3	Auto Hobby Shop	N/A	N/A	LOCKED		
1509	3	Div Logis Fac	N/A	N/A	Y	Y	Y
1510	3	Tac Equip Shop	N/A	N/A	N		
1540	3	Tac Equip Shop	95	PW	N		
1720	2	D.S. Maint Fac	148	DHW	Y	N-N/A	N
1810	2	Tac Equip Shop	N/A	N/A	N		
1820	2	Tac Equip Shop	N/A	N/A	Y	N-N/A	N
1840	2	Tac Equip Shop	N/A	N/A	Y	N	Y
2115	1	Dental Clinic	N/A	N/A	Y	N	N
2125	1	Chapel	120	DHW	Y	N	N
3001	S	S. Energy Plant	N/A	N/A	Y	Y	
3002	S	Admin.	N/A	N/A	Y	Y	N
4502	S	Tac Equip Shop	N/A	N/A	N		
4528	S	Tac Equip Shop	N/A	N/A	N		
4577	S	Tac Equip Shop	N/A	N/A	N		
4578	S	Tac Equip Shop	N/A	N/A	N		
TOTALS		140			127	42	41

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 206
2. Building Name: TARO Learning Center (converted living hall)
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ✓; SEP ____

4. Locate domestic hot water faucet:

- Room Number: _____
- Room Name: Norris Rm

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 80 °F

6. Other observations or notes:

Hot water converter valued off
CW pump leaking
* HTWS leaking steam and ~ $\frac{2}{3}$ cup / 2 min from entrance
to steam generator

INITIALS: PAH; DATE: 10/4/75

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: ~~207~~ 207
2. Building Name: Dining Hall
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: Mech Rm

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 124 °F

6. Other observations or notes:

Mech Rm. - No leaks

INITIALS: SA; DATE: 10/4/95

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 208
2. Building Name: Gym
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: Men's Locker Room #2

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 103 °F

6. Other observations or notes:

* ~ 1 drop / 10 sec from HTWS valve where it goes
to ht exchanger on the left.

INITIALS: SPA; DATE: 10/4/95

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 211
2. Building Name: Admin.
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____

4. Locate domestic hot water faucet:

- Room Number: _____
- Room Name: 412/Admin. Mc Pm

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

* HTWS valve stem leaking steam + about
3 drops/sec HTW. Valve just above floor
where HTW enters dm.

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 212
2. Building Name: Sewing School / Admin Converted Barracks
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____

4. Locate domestic hot water faucet:

- Room Number: D113
- Room Name: Restroom in Sewing Rm

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 131 °F

6. Other observations or notes:

Slow drain (sink)

M.E. Rm. — No Leaks

INITIALS: GA; DATE: 10/4/95

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 213
2. Building Name: Barracks
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
4. Locate domestic hot water faucet:
 - Room Number: D113
 - Room Name: Janitor's Closet

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 120 °F
6. Other observations or notes:

M.E. Rm. - No Leaks

INITIALS: ST; DATE: 10/4/95

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 215
2. Building Name: Baracks
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____

4. Locate domestic hot water faucet:

- Room Number: D-2
- Room Name: Restroom-Male

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 137 °F

6. Other observations or notes:

* Mech. Rm. : ^{Hot water} Heat exchanger for HWG is leaking. How
badly; I took a 1 min sample, did not get all
of leak in sample, other drips and steam present.
Sample was ~ 1.5 cups/min
→ 12/1/95 this leak has been fixed.

INITIALS: mtt; DATE: 10-4

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 216
2. Building Name: Barvacks
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ✓; SEP ____

4. Locate domestic hot water faucet:

- o Room Number: D-?
- o Room Name: Laundry Rm

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 110 °F

6. Other observations or notes:

Mech. Rm. ~~OK~~.

* Heat exchanger flange at HWG is leaking at
about 20 drops / sec

INITIALS: wth; DATE: 10-4

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 217
2. Building Name: HQ / Admin
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
4. Locate domestic hot water faucet:
 - o Room Number: _____
 - o Room Name: Mech. Room

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

* - Leaking Valve ^{stem} on HTWR valve just above
entrance to floor. ~ 1 drop / 3 sec

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 218
2. Building Name: Barracks
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____

4. Locate domestic hot water faucet:

- Room Number: D-?
- Room Name: Laundry Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 124 °F

6. Other observations or notes:

- Valve pit between 218 & 217 - OK no leaks
- Dthw leaking badly at ^{life} pump - in mech. rm.

INITIALS: wtt; DATE: 10-4

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 223
2. Building Name: Admin.
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ✓; SEP ____

4. Locate domestic hot water faucet:

- Room Number: _____
- Room Name: mech

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

* HTW's valve ^{stem} leaking (located near door where HTW enters bldg. ~ 1 drop / 6 sec)

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 224
2. Building Name: HQ / Admin.
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____

4. Locate domestic hot water faucet:

- o Room Number: —
- o Room Name: Meals Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

* HTW leaking at heat exchanger - measured
about $5\frac{2}{3}$ cups per minute + a fair amount of
steam

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 225
2. Building Name: Admiral
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
4. Locate domestic hot water faucet:
 - o Room Number: _____
 - o Room Name: Mech Equip.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

M.E. Rm. - No Leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 230
2. Building Name: Tac Equip Shop
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ✓; SEP ____

4. Locate domestic hot water faucet:

- Room Number: _____
- Room Name: Med. Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 241
2. Building Name: Tac Equip Shop
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
4. Locate domestic hot water faucet:
 - o Room Number: _____
 - o Room Name: Mech. Rm

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 260
2. Building Name: Tac Equip Shop
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
4. Locate domestic hot water faucet:
 - o Room Number: _____
 - o Room Name: Mech. Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 270
2. Building Name: Tac Equip Shop
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____

4. Locate domestic hot water faucet:

- Room Number: _____
- Room Name: Mech Equip

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

* ~ 11 drop / 5 sec HTW leaking from valve above HTW
entrance to room

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 302
2. Building Name: Hospital
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
4. Locate domestic hot water faucet:
 - Room Number: Rm #106
 - Room Name: Mens Locker Rm

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 137 °F

6. Other observations or notes:

- Mixing valve is not working on DHW, should
send 105° to bathrooms + 145°F to kitchen.
- HWG's (2) set ~ 140°F
- Steam Gen. read ~ 55 psi steam
= No HTW leaks in Bldg 350

INITIALS: wth; DATE: 10-4

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 403
2. Building Name: Child Care Center
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ____; SEP ____ N/A

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: Mech. Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

- UG Hot water heater is NG fired HW boiler for HVAC
- Condensate leak from CHW coil pan
- AHU filters are very dirty
- Map shows HTW lines but they do not come in the bldg.

INITIALS: Wlt; DATE: 10-4

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 439
2. Building Name: Phy. Fitness Center
3. HTW Zone No.: 1 ____; 2N ____; 2S ~~2S~~; 3 ____; SEP ____ (N/A)

4. Locate domestic hot water faucet:
- o Room Number: _____
 - o Room Name: Restroom

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 139 °F

6. Other observations or notes:

- Natural gas DHW & space heating
- No water leaks

INITIALS: will; DATE: 10-3

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 440
2. Building Name: Dental Clinic #1
3. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____
4. Locate domestic hot water faucet:
- o Room Number: -
 - o Room Name: Restroom

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 114 °F

6. Other observations or notes:

1/17/96 - DHWG has no leaks, temp gauge reads ~
116°F, no water from relief valve.
Leak in H+ ex. is not likely

INITIALS: RA; DATE: 10/3/95

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 501
2. Building Name: Barracks
3. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____
4. Locate domestic hot water faucet:
- Room Number: H153
 - Room Name: Men's Room

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 134 °F

6. Other observations or notes:

*

Under Run

HTW valve stem leaking ~ 1 drop / 3 sec - valve
in line ~~between~~ between HWG + HVAC ht ex

INITIALS: AA; DATE: 10/3/95

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 503
2. Building Name: Barracks
3. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____
4. Locate domestic hot water faucet:
 - o Room Number: D153
 - o Room Name: Men's Room

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 122 °F

6. Other observations or notes:

✕ Mech Run:

- HTW leaking at HWG heat exchanger Flange - leaks measured at ~ 1/2 cup / 2 min
- HTWR Flange leaking steam where it enters mech room (just above floor).

INITIALS: GA; DATE: 10/3/95

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 504
2. Building Name: Barracks
3. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____
4. Locate domestic hot water faucet:
 - o Room Number: D153
 - o Room Name: Restroom - Mens

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 158 °F

6. Other observations or notes:

water temp. started dropping after ~2 min
Valve pit next to 504 - no leaks; Sump pump not working

* Mech Rm - Shut off valve for ~~low~~ HTW
return from DHWG is leaking - measured Leak
Flow for ~1 min in sample water → 0.75 cup/min

12/1/95

leak fixed

INITIALS: wtt; DATE: 10-3

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 506
2. Building Name: Admin.
3. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____

4. Locate domestic hot water faucet:

- Room Number: _____
- Room Name: Mech. Equip

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No HTW Leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 507
2. Building Name: Admin
3. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: Mech Equip

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

* HTW Supply valve stem leaking ~ 1 drop/sec, just
above floor where HTW enters room.

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 508
2. Building Name: Admin.
3. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____

4. Locate domestic hot water faucet:

- Room Number: _____
- Room Name: Medi-Equip.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No HTW Leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 509
2. Building Name: Admin.
3. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: Mech. Equip.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

Small chilled water leak.

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 512
2. Building Name: DINING FACILITY
3. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____
4. Locate domestic hot water faucet:
 - o Room Number: -
 - o Room Name: KITCHEN SINK NEAR MGR'S OFFICE

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 145 °F
6. Other observations or notes:
 - 11 psi on RE Boiler - 135°F ON VERTICAL TANK
 - * - 1 3/4 cup / 90 sec. leak from HWG heat exchanger
flange, water is not very hot, may be pot. water.
 - Small stream of condensate leaking from "Tee"
fitting behind condensate tank - not HTW.

INITIALS: GWF; DATE: 10-3

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 514
2. Building Name: Barracks
3. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____
4. Locate domestic hot water faucet:
 - o Room Number: D-7
 - o Room Name: Restroom

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 126 °F

6. Other observations or notes:

* Mech. Rm.
Flange at HWG is leaking steam and ~ 1 drop / 4 sec HTW

INITIALS: Witt; DATE: 10-2

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 515
2. Building Name: Bar racks
3. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____
4. Locate domestic hot water faucet:
 - o Room Number: D ?
 - o Room Name: Restroom-Mens

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 123 °F

6. Other observations or notes:

DHW circ pump is leaking - HW on bldg. side

INITIALS: Wtt; DATE: 10-2

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 516
2. Building Name: Barracks
3. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____
4. Locate domestic hot water faucet:
 - o Room Number: D-
 - o Room Name: Restroom

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 145+°F

6. Other observations or notes:

Med's Pm.
- HWR overflow leaking at 1/2 cup / 5 sec
Water temp is ~105°F
from top of tank intermittently
more than

INITIALS: wth; DATE: 10-2

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 517
~~517~~
2. Building Name: Barracks
3. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____
4. Locate domestic hot water faucet:
- o Room Number: D-?
 - o Room Name: Restroom

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 175 °F

6. Other observations or notes:

- Mech. room locked, ^{locked} through window, valve closed
no overflow. lock does not open with standard
mech. rm. key. No leaks visible at HWG.

INITIALS: wtt; DATE: 10-2

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 518
2. Building Name: Barracks
3. HTW Zone No.: 1 ; 2N ; 2S ✓; 3 ; SEP
4. Locate domestic hot water faucet:
 - Room Number: D 153
 - Room Name: Restroom-Mens

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 183+°F

6. Other observations or notes:

~ 1/2 gpm of 190[°] + water flowing from
the overflow of the HWG. Control valve
read "closed".

~ 1/4 cup / 5 sec + some spillage (say 1/2 cup / min)

* ~ 10d / 3 sec from ^{HWG} ex flange

INITIALS: wll; DATE: 10-2

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 520
2. Building Name: Admin.
3. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____
4. Locate domestic hot water faucet:
 - o Room Number: _____
 - o Room Name: Mech. Equip.

Run hot water for 1 to 2 minutes.
Take sample of water.
Mark building number on sample.
5. Take temperature reading of hot water: N/A °F
6. Other observations or notes:

Small chilled water leak

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 521
2. Building Name: Admin.
3. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____

4. Locate domestic hot water faucet:

- Room Number: _____
- Room Name: Mech. Equip.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

* ~ 1 drop / 2 sec HTW leak from valve stem on
HTWS where it enters the room.

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 522
2. Building Name: Admin.
3. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____

4. Locate domestic hot water faucet:

- Room Number: _____
- Room Name: Medi. Equip.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

* ~1 drop/4 sec HTW leak from valve stem on
HTW supply line where it enters the room.

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 523
2. Building Name: Admin.
3. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____
4. Locate domestic hot water faucet:
 - o Room Number: _____
 - o Room Name: Med. Equip.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No HTW leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 524
2. Building Name: Admin.
3. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____

4. Locate domestic hot water faucet:

- Room Number: _____
- Room Name: Mech. Equip

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No HTW leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 525
2. Building Name: Admin.
3. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: Mech. Equip.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

* ~ 1 drop / 11 sec HTW leak from valve stem on HTWR
line where it enters the room.

Valve crank is also broken off.

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 608
2. Building Name: Gym
3. HTW Zone No.: 1 ____; 2N ____; 2S ✓; 3 ____; SEP ____

4. Locate domestic hot water faucet:

- Room Number: _____
- Room Name: 1ST FLOOR men's Room

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 127 °F

6. Other observations or notes:

Mech. Room:

* HTWR leak from control valve stem ~ 5d/min

INITIALS: GWF; DATE: 10-3

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 610
2. Building Name: Chapel
3. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____

4. Locate domestic hot water faucet:

- Room Number: 115
- Room Name: Restroom - Mens

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 115 °F

6. Other observations or notes:

Mech. Rm. has poor lock. - No leaks

INITIALS: WTT; DATE: 10-4

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 612
2. Building Name: Admin.
3. HTW Zone No.: 1 ____; 2N ____; 2S ☒; 3 ____; SEP ____

4. Locate domestic hot water faucet:

- Room Number: _____
- Room Name: Mech. Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

- * HTWR leak from control valve stem ~ 5d/min
- Bldg. side leak at circ. pump ~ 1d/min
- " " HW leak at valve ~ 1d/2min
- _____
- _____
- _____

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 614
2. Building Name: Admin.
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐
4. Locate domestic hot water faucet:
 - o Room Number: _____
 - o Room Name: Mech. Room

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

AHU is leaking large amount of air

No water leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 616
2. Building Name: Admin.
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐
4. Locate domestic hot water faucet:
 - o Room Number: _____
 - o Room Name: Mech. Room

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F
6. Other observations or notes:
 - HVAC HW leak from relief valve on ht. ex. shell ~ 1d/min
 - O.B. fan bearing on AHU is noisy

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 617
2. Building Name: Admin.
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
4. Locate domestic hot water faucet:
 - Room Number:
 - Room Name: Mechanical Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

Door locked - Used knife

No leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 618
2. Building Name: Admin.
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
4. Locate domestic hot water faucet:
 - o Room Number:
 - o Room Name: Mech. Room

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No leaks

AHU Fan belts are loose

INITIALS: ; DATE:

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 619
2. Building Name: Admin
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP

4. Locate domestic hot water faucet:

- Room Number:
- Room Name: Medi. Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 620
2. Building Name: 61 ADJUTANT GENERAL / INSTALLATION CHAPLAIN
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
4. Locate domestic hot water faucet:
 - Room Number: 124
 - Room Name: MAINT/BREAK ROOM

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 112°F

6. Other observations or notes:

2 HOT WATER TANKS - ONE IN SERVICE - ONE OUT OF
SERVICE.

(CONTROL VALVE CLOSED)

INITIALS: GWF; DATE: 10-3

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 621
2. Building Name: DIR of RESOURCE MGT. / INT. REVIEW / FINANCE
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
4. Locate domestic hot water faucet:
 - o Room Number: FIRST FLOOR BREAK ROOM / VENDING MACH.
 - o Room Name:

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 91 °F

6. Other observations or notes:

BROKEN HASP ON DOOR
2 HOT WATER TANKS - ONE IN SERVICE - ONE OUT OF SERVICE. IN SERVICE HEATER IS VALVED OFF. OUT OF SERVICE HEATER IS MISSING TEMP CONTROL VALVE.

INITIALS: GWF; DATE: 10-3

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 622
2. Building Name: Dir. of Contracting
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
4. Locate domestic hot water faucet:
 - Room Number: 146
 - Room Name: MEN'S ROOM

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 85 °F
6. Other observations or notes:
HOT WATER SYSTEM OFF. CIRC. Pump off.

INITIALS: GWF; DATE: 10-3

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 623
2. Building Name: ALCOHOL & DRUG ABUSE
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐
4. Locate domestic hot water faucet:
 - o Room Number: NO NUMBER
 - o Room Name: 1ST FLOOR Men's Room

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 109 °F

6. Other observations or notes:

2 HOT WATER TANKS - ONE OUT OF SERVICE - ONE
IN SERVICE - CIRC PUMP LEAKING

INITIALS: GWF; DATE: 10-3

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 624
2. Building Name: VOLUNTEER Family Support Group
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
4. Locate domestic hot water faucet:
 - o Room Number:
 - o Room Name: Mech. Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 84 °F

6. Other observations or notes:

NO ACCESS TO MECH. ROOM - NO HOT WATER

M.R. locked - used knife

- No HTW leaks

- Condensate storage tank leak in corner ~ 5-10 d/sec

- Bldg. Side steam leak

INITIALS: GWf; DATE: 10-3

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 1026
2. Building Name: 1ST BRIG. DINING FACIL.
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
4. Locate domestic hot water faucet:
 - o Room Number: KITCHEN SINK
 - o Room Name:

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 145 °F
6. Other observations or notes:
10 PSIG DRUM PRES. - LEVEL IN GLASS. 1/2 FULL

INITIALS: GWF; DATE: 10-3

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 628
2. Building Name: Liberty Brigade - Admin.
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP

4. Locate domestic hot water faucet:

- o Room Number:
- o Room Name: Mech Rm

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

- Electric DHW heater

* - ~ 1 drop / 5 sec HTW leak from control valve
on HTWR line from HVAC heat exchanger

INITIALS: ; DATE:

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 029
2. Building Name: Barracks
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐
4. Locate domestic hot water faucet:
- o Room Number:
 - o Room Name: Men's Room

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 160 °F

6. Other observations or notes:

Mech. Room:

- 211+ °F HW leaking from relief valve/drain on
HVAC heat ex. shell ~ 1/2+ cup/5 sec = 6cup/min

- Small CHW leak where pipes enter floor

INITIALS: GH; DATE: 10/3/95

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 630
2. Building Name: Barracks
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐
4. Locate domestic hot water faucet:
- o Room Number:
 - o Room Name: Mech Room

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 117 °F

6. Other observations or notes:

Mech. Rm.:

- Hot water leak from relief valve / drain on shell of
HVAC heat ex. ~ 2d / 10 sec

- Bldg. side Hw leak from air separator drain valve ~ 2d / 5 sec

INITIALS: BA; DATE: 10/3/95

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 631
2. Building Name: Barracks
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐

4. Locate domestic hot water faucet:

- o Room Number: B-7
- o Room Name: Restroom

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 142°F

6. Other observations or notes:

- * - 0.55 cup/min HTW from HWG control valve stem.
- * - 1/3 cup/min HTW from HWG heat ex. Flange.

- Also has water leak on HVAC side of ht. ex.

INITIALS: WTH; DATE: 10-3

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 632
2. Building Name: Barracks
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐
4. Locate domestic hot water faucet:
- o Room Number: B-2
 - o Room Name: Restroom

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 160 +
~~154~~
~~153~~ °F

6. Other observations or notes:

Washers running, restroom DHW pressure was very
low - press. in laundry sink was good

Mech. Rm. no ~~any~~ HW leaks, insulation missing
on about 4'x4' area of DHW generator.

Small potable water leak

INITIALS: wtt; DATE: 10-3

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 633
2. Building Name: Barracks
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐

4. Locate domestic hot water faucet:

- Room Number: D-?
- Room Name: Laundry Rm

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 128 °F

6. Other observations or notes:

* ~ 2 drops / sec HTW From HWG ht. ex. Flange, not
too hot and no steam - may be pot. water.

- Leak on HVAC side of ht. ex. - relief valve is
passing some water.

INITIALS: Wtl; DATE: 10-3

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 634
2. Building Name: Barracks
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐
4. Locate domestic hot water faucet:
 - o Room Number:
 - o Room Name:

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: °F

6. Other observations or notes:

Door locked to Laundry / Restroom area

Mech. Room: No leaks

INITIALS: GA; DATE: 10/3/95

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 635
2. Building Name: Sarrachis
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: Restroom

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 140 °F

6. Other observations or notes:

Mech. Room:

* Steam and ~ 10 d/17 sec. leaking from heat ex.
flange on DHW generator

INITIALS: GA; DATE: 10/3/95

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 636
2. Building Name: Barrocks
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: Laundry Rm

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 132 °F

6. Other observations or notes:

Mech. Room:

* HTWS leak from valve stem of 2nd valve after
HTW enters floor. ~ 1d/5sec + 1d/60sec + some steam

- DHW leak from DHWG drain pipe ~ 10-20 d/sec

INITIALS: PA; DATE: 10/3/95

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 637
2. Building Name: Barracks
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐

4. Locate domestic hot water faucet:

- Room Number: _____
- Room Name: Men's Room

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 158 °F

6. Other observations or notes:

Mech. Room - No leaks

INITIALS: PA; DATE: 10/3/95

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 638
2. Building Name: Admin.
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐
4. Locate domestic hot water faucet:
 - o Room Number: _____
 - o Room Name: Mech. Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

HVAC circ pump dripping at 2 flange connections
~ 3 drops / 10 sec

INITIALS: _____; DATE: _____

1. Building Number: 639
2. Building Name: Admin.
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
4. Locate domestic hot water faucet:
 - Room Number:
 - Room Name: Mech. Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: _____ °F

6. Other observations or notes:

* Steam and ~ 10 drops / 18 sec HTW leaking from 1st HTWS valve stem to HVAC ht. ex.

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 640
2. Building Name: Admin.
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐
4. Locate domestic hot water faucet:
 - o Room Number: _____
 - o Room Name: Mech. Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 641
2. Building Name: Admin.
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
4. Locate domestic hot water faucet:
 - Room Number:
 - Room Name: Mech. Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F
6. Other observations or notes:
No leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 642
2. Building Name: Mess Hall ~~18422000~~
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
4. Locate domestic hot water faucet:
- o Room Number:
 - o Room Name: Restroom

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 154⁺°F

6. Other observations or notes:

Valve pit between bldgs 630 & 640; slight steam and
drip from conduit vents (side facing #635)

Valve pit between 642 & 632, no steam or drips
Pit next to 649 - no leaks

Mech. Rm. - No major leaks of HTW or steam

DHW ^{supply line} leaking from top of DHWG tank ~ 5d/sec

Pit at north corner of #635 - no leaks

INITIALS: wtt; DATE: 10-3

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 643
2. Building Name: Admin.
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP

4. Locate domestic hot water faucet:

- o Room Number:
- o Room Name: Mech. Equip.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

* ~ 1 drop / 10 sec HTW leak from HTWS valve stem
at HVAC heat exchanger.

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 644
2. Building Name: Admin.
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP

4. Locate domestic hot water faucet:

- Room Number:
- Room Name: Medi. Equip

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

* ~ 1 drop / 3 sec ^{HTW + steam} leak from HTW valve stem

~ 1 1/8 cup/min leak from relief valve/drain
line from HVAC heat. ex.

INITIALS: ; DATE:

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 645
2. Building Name: Admin.
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐

4. Locate domestic hot water faucet:

- Room Number: _____
- Room Name: Mech. Equip.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No HTW leaks

No other leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 646
2. Building Name: Admin.
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
4. Locate domestic hot water faucet:
 - o Room Number:
 - o Room Name: Mech. Equip.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No HTW leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 647
2. Building Name: Admin.
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP

4. Locate domestic hot water faucet:

- Room Number:
- Room Name: Mech. Equip

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

* ~ 1 drop / 5 sec leak from HTWS valve stem
at HVAC heat exchanger.

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 648
2. Building Name: Admin.
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
4. Locate domestic hot water faucet:
 - o Room Number:
 - o Room Name: mech. Room

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

- Leak on HVAC hot water side - relief valve is passing some water

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 649
2. Building Name: Admin
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐
4. Locate domestic hot water faucet:
 - o Room Number: _____
 - o Room Name: Mech. Equip.

Run hot water for 1 to 2 minutes.
Take sample of water.
Mark building number on sample.
5. Take temperature reading of hot water: N/A °F
6. Other observations or notes:

No HTW leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 701
2. Building Name: Health Clinic #1
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: _____

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 152 °F

6. Other observations or notes:

MR. LOCKED → Used knife to get in

* 1d/5 HTW leak from control valve stem

* Missing pipe insulation

INITIALS: PH; DATE: 10/5/95

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 702
2. Building Name: Enlisted Men's Club (Music/Ent. Center)
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐
4. Locate domestic hot water faucet:
- o Room Number:
 - o Room Name: Men's Room

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 143 °F

6. Other observations or notes:

Locked

No leaks

INITIALS: SA; DATE: 10/3/75

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 703
2. Building Name: Enlisted Mens Club
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: _____

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: _____ °F

6. Other observations or notes:

- Mech. Room Locked

- Noticeable natural gas leak at meter on
east side of building

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 704
2. Building Name: Theatre
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐
4. Locate domestic hot water faucet:
 - o Room Number: _____
 - o Room Name: _____

Run hot water for 1 to 2 minutes.
Take sample of water.
Mark building number on sample.
5. Take temperature reading of hot water: _____ °F
6. Other observations or notes:

Elec. water heater

- Relief valve for chilled water is leaking

- AHU Belts are loose

- Lights tubes are burnt out

INITIALS: PA; DATE: 10/3/75

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 706
2. Building Name: Branch Exchange
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐
4. Locate domestic hot water faucet:
- o Room Number:
 - o Room Name: Medi Rm

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

- Bldg. side HW leak at circ pump shaft ~2-3 d/s

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 708
2. Building Name: ~~Boys~~ Gym / Fitness Center
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: Mens Locker Room

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 131 °F

6. Other observations or notes:

- No HTW leaks

- North LPHW heat ex. R.Valve leaking ~ 5 d/s

- DHW storage tank R.Valve leaking ~ 1 cup/min

INITIALS: WTT; DATE: 10-3

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 710
2. Building Name: Admin. / H.Q.
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
4. Locate domestic hot water faucet:
- o Room Number:
 - o Room Name:

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

- Chilled water leak $\sim 2\text{d/minute}$

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 712
2. Building Name: Barracks
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐
4. Locate domestic hot water faucet:
 - o Room Number: D-?
 - o Room Name: Restroom

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 135 °F

6. Other observations or notes:

Valve pit between 712 & 717 - no leaks
" " " 717 & 720 - no leaks

Mech Room :
Slight leak from chilled water supply valve where
pipe enters at floor

INITIALS: wtt; DATE: 10-3

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 713
2. Building Name: Barracks
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐

4. Locate domestic hot water faucet:

o Room Number: D-?

o Room Name: Restroom

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 133 °F

6. Other observations or notes:

Mech Room:

- Slight bldg. side leak from air separator tank drain
valve; not HTW

INITIALS: wtt; DATE: 10-3

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 714
2. Building Name: Barracks
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐
4. Locate domestic hot water faucet:
 - o Room Number: D-7
 - o Room Name: Restroom - men

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 137 °F

6. Other observations or notes:

Mech. Room :

Slight leak from air separator drain valve; not HTW

INITIALS: Wst; DATE: 10-3

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 715
2. Building Name: Barracks
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP

4. Locate domestic hot water faucet:

- Room Number: D-7
- Room Name: Restroom/Storage

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 135 °F

6. Other observations or notes:

Mech. Rm.:

* HTW leak from HTWR control valve at DHW Generator
~ 1 d/5 sec

INITIALS: wtt; DATE: 10-3

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 717
2. Building Name: Barracks (DISCOM)
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐

4. Locate domestic hot water faucet:

- Room Number: _____
- Room Name: Ladies Restroom

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 131 °F

6. Other observations or notes:

No leaks in Mech. Rm.

INITIALS: JA; DATE: 10/5/95

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 718
2. Building Name: Barracks
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: Ladies Restroom

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 124 °F

6. Other observations or notes:

- Medl. Room:
- * 1 d/10 sec HTW leak from HTWS valve stem } where
* " " " " HTW bypass valve stem } pipes
enter @ Floor
- ~ 1 1/2 cup/min chilled water leak from control valve

INITIALS: mt; DATE: 10/3/95

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 719
2. Building Name: Barracks
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: Restroom

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 112 °F

6. Other observations or notes:

Mech. Room :

* ~ 1 d/sec HTW leak from HVAC HTWR valve;
2nd valve down stream from control valve

INITIALS: MA; DATE: 10/3/95

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 120
2. Building Name: Barrocks
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐

4. Locate domestic hot water faucet:

- Room Number:
- Room Name: Restroom

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 130 °F

6. Other observations or notes:

Mech. Rm:

Slight DHW leak from relief valve on side
of DHW generator.

INITIALS: PA; DATE: 10/3/95

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 721
2. Building Name: Admin.
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐

4. Locate domestic hot water faucet:

- Room Number: _____
- Room Name: mech Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: _____ °F

6. Other observations or notes:

No DHW

No HTW leaks

No other leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 722
2. Building Name: Admin.
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: Mech Rm

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

* ~ 1 drop/sec HTW leak from bypass valve stem
where pipe enters floor

~ 3d/s Hw & steam leak at circ. pump to air handler(s).

* there is a control problem here or HVAC Ht. Ex. is
leaking HTW. Bldg Hw should not be hot enough
to produce steam

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 723
2. Building Name: Admin.
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐

4. Locate domestic hot water faucet:

- Room Number: _____
- Room Name: Mech. Rm

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No leaks.

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 724
2. Building Name: Admin.
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐

4. Locate domestic hot water faucet:

- Room Number: _____
- Room Name: Mech. Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No leaks.

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 725
2. Building Name: Admin
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐

4. Locate domestic hot water faucet:

- Room Number: _____
- Room Name: Mech Rm

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

- Elec DHW

- No HTW leaks in HVAC system

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 126
2. Building Name: Mess Hall - DISCOM Dining Facility
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP

4. Locate domestic hot water faucet:

- Room Number:
- Room Name: Restroom

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 158 °F

6. Other observations or notes:

Mechanical Room:

- Some bldg. side HW leaks at condensate return
unit - next to steam generator

- Small DHW leak at DHW circ. pump next to
DHW generator.

INITIALS: JA; DATE: 10/3/95

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 727
2. Building Name: Training Facility
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ____; SEP ____ (N/A)

4. Locate domestic hot water faucet:

- Room Number: _____
- Room Name: _____

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

Heat Pump space heat → NO DHW & NO HTW

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 728
2. Building Name: DISCOM - Admin.
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐
4. Locate domestic hot water faucet:
 - o Room Number: _____
 - o Room Name: Mech RmRun hot water for 1 to 2 minutes.
Take sample of water.
Mark building number on sample.
5. Take temperature reading of hot water: N/A °F
6. Other observations or notes:

Elec DHW heater

X Steam and ~ 2 drops/sec from HTWS valve stem,
Also ~ 1 drop/20 sec HTW leak from HTW Bypass valve stem
both valves above where HTW enters + leaves floor

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 810
2. Building Name: Bar racks
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐
4. Locate domestic hot water faucet:
- o Room Number:
 - o Room Name: Mech Room
- Run hot water for 1 to 2 minutes.
- Take sample of water.
- Mark building number on sample.
5. Take temperature reading of hot water: 131 °F
6. Other observations or notes:
- Steam leak in valve pit West corner of bldg

① NW Mech. Rm.: HVAC only - No leaks

② SE Mech. Rm.: DHW Gen. only - No leaks

DHWG heat ex: Richmond Engineering Co., Inc., Richmond, VA

Mfg. No. K56293, Year 1977, Des. Press = 400

Head thickness = 0.219", Head radius = 2.1

Shell " = 0.322", Tank dia = 8.625"

Overall length = 61", National Board = 74236

INITIALS: QA; DATE: 10/3/95

Max. working temp = 400 °F

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 811
2. Building Name: Admin.
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐
4. Locate domestic hot water faucet:
 - o Room Number: _____
 - o Room Name: Mech. Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 812
2. Building Name: Admin.
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
4. Locate domestic hot water faucet:
 - Room Number:
 - Room Name: Mech. Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: B13
2. Building Name: Admin.
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
4. Locate domestic hot water faucet:
 - o Room Number:
 - o Room Name: Mech. Rm

Run hot water for 1 to 2 minutes.
Take sample of water.
Mark building number on sample.
5. Take temperature reading of hot water: N/A °F
6. Other observations or notes:

No leaks

INITIALS: _____; DATE: _____

1. Building Number: 814

2. Building Name: Admin.

3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP

4. Locate domestic hot water faucet:
- Room Number: _____
 - Room Name: Mech. Rm

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

- HVAC circ. pump is leaking about 3d/s of bldg. side Hw.

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 815
2. Building Name: Admin.
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
4. Locate domestic hot water faucet:
 - Room Number:
 - Room Name: Mech. Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 816
2. Building Name: Admin.
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐
4. Locate domestic hot water faucet:
 - Room Number: _____
 - Room Name: Mech. Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

Bldg. side Hw leak from drain valve ~ 1d/min
" " " " " packing ~ 6d/min

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 818
2. Building Name: Admin.
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
4. Locate domestic hot water faucet:
 - Room Number:
 - Room Name: Mech. Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 819
2. Building Name: Admin.
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐
4. Locate domestic hot water faucet:
 - o Room Number: _____
 - o Room Name: Mech. Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

* HTWR leak from valve packing ~ 4d/min
* HTW leak from bypass valve packing ~ 3d/min
* HTWS leak from valve packing ~ 1d/min

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 1160
2. Building Name: D.S. Maint Facility
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ✓; SEP ____

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: Mech equip

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

* Control valve on HTWR leaking steam and a
little HTW, most evaporates before it drips

* HTWR valve above Floor is leaking ~ 1d/30 sec

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 1170
2. Building Name: G. S. Maint. Facility
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
4. Locate domestic hot water faucet:
 - o Room Number: _____
 - o Room Name: Mech Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 1208
2. Building Name: Tac Equip Shop
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐
4. Locate domestic hot water faucet:
 - o Room Number: _____
 - o Room Name: Mech. Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

~ 1d/5sec from HVAC HT ex drain valve

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 1209
2. Building Name: Tac Equip Shop
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
4. Locate domestic hot water faucet:
 - Room Number:
 - Room Name: Mech Rm

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 1211
2. Building Name: Tac Equip Shop
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP
4. Locate domestic hot water faucet:
 - Room Number:
 - Room Name: Mech Rm

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 1245
2. Building Name: Tac Equip Shop
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ____; SEP ____ (N/A)

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: Mech. Room

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

- Oil boiler for HVAC
- Elec DHW heater
- HVAC circ pump leaking ~~water~~ + bearings
sound bad.

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 1259
2. Building Name: Tac Equip Shop
3. HTW Zone No.: 1 ✓; 2N ; 2S ; 3 ; SEP

4. Locate domestic hot water faucet:

- o Room Number:
- o Room Name: Medr. Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

* ~ 1/4 cup /min HTW leaking from HTWS
supply line ^{shut off} ~~tapped~~ valve tapped off of line next to HTW
entrance ~~down~~ to floor/rm

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 1265
2. Building Name: Tac Equip Shop
3. HTW Zone No.: 1 ____; 2N ☒; 2S ____; 3 ____; SEP ____

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: Mech Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 1280
2. Building Name: Tac Equip Shop (Small, 3-Bay)
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ____; SEP ____ N/A

4. Locate domestic hot water faucet:

- Room Number: _____
- Room Name: Mech. Room

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

Nat gas heating, electric DHW

— Relief valve is dumping a lot of heating
hot water ^{~150°F} down the drain

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 1320
2. Building Name: Vehicle Maint.
3. HTW Zone No.: 1 ____; 2N ☒; 2S ____; 3 ____; SEP ____
4. Locate domestic hot water faucet:
- o Room Number: ____
 - o Room Name: Mech. Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

- #2 Fuel oil boiler for space heating?
Appears to have elec. water hrs } for new wing

1/13/96

- Old mech room has HTW w/ heat exchanger
for space heating - No leaks

INITIALS: PA; DATE: 10/3/95

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 1330
2. Building Name: Tac Equip Shop
3. HTW Zone No.: 1 ____; 2N ☒; 2S ____; 3 ____; SEP ____
4. Locate domestic hot water faucet:
 - o Room Number: _____
 - o Room Name: Mech Room

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

* 1d/8 sec HTW from HTWS valve stem
above entry at floor

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 1340
2. Building Name: Tac Equip Shop
3. HTW Zone No.: 1 ____; 2N ☒; 2S ____; 3 ____; SEP ____

4. Locate domestic hot water faucet:

- Room Number: _____
- Room Name: Mech. Room

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 1503
2. Building Name: Auto Hobby Shop
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____

4. Locate domestic hot water faucet:

- Room Number: _____
- Room Name: Mech. Room

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

Closed Tues & Wed
Normal hrs 1300 - Mon, Thurs, Fri
Mech. Room locked - No access

INITIALS: DA; DATE: 10/3/95

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 1509
2. Building Name: DMMC
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ✓; SEP ____

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: Mech. Room

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

Steam from HTW conduit vent in pit behind
this building. HVAC heating only?

1/17/96 slight cHW leak from ^{bypass} valve at ^{floor} entry

* ~ 30 drops/10 sec HTW leak from HTW return
valve down stream from HVAC ht ex

~ 20 cns/min HW leak from HVAC heat ex. relief valves

INITIALS: wtt; DATE: 10-3

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 1510
2. Building Name: Tac Equip Shop
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: Mech. Room

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

No DHW, Heating only. Wash racks
are using portable steam cleaners

INITIALS: WFF; DATE: 10-3

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 1540
2. Building Name: Motor Pool / Tac Equip Shop
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ☒; SEP ____
4. Locate domestic hot water faucet:
 - o Room Number: ____
 - o Room Name: Restroom

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 95 °F
6. Other observations or notes:
Electric Water Heater

INITIALS: JA; DATE: 10/3/95

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 1720
2. Building Name: D.S. Maintenance Facility
3. HTW Zone No.: 1 ____; 2N ☒; 2S ____; 3 ____; SEP ____
4. Locate domestic hot water faucet:
- o Room Number: ____
 - o Room Name: Restroom

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 148 °F

6. Other observations or notes:

Slow to heat.

→ Not Gas DHW

→ Oil fired Heating boiler

→ HTW capped off at entrance, pipes are cold

so probably valved off at pit.

INITIALS: RA; DATE: 10/3/95

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 1320
2. Building Name: Tac Equip shop
3. HTW Zone No.: 1 ____; 2N ☒; 2S ____; 3 ____; SEP ____

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: Meals Room

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: NA °F

6. Other observations or notes:

HVAC heat ex. valved off from HTW; A
N-gas water heater ^{is now used} For HVAC; there is a small
" " " For DHW.
No leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 1340
2. Building Name: Tac Equip Shop
3. HTW Zone No.: 1 ____; 2N ☒; 2S ____; 3 ____; SEP ____

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: Mech. Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

HVAC (LTHW) circ pump is leaking

No HTW leaks

INITIALS: _____; DATE: _____

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 2115
2. Building Name: Dental Clinic
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: Mech. Room

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

Has two elec. HTW heaters

No leaks in Mech. Rm.

INITIALS: wth; DATE: 10-3

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 2125
2. Building Name: Chapel
3. HTW Zone No.: 1 ☒; 2N ☐; 2S ☐; 3 ☐; SEP ☐

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: Mens Restroom

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: 120 °F

6. Other observations or notes:

Also took potable (cold) water sample #2125-P

No leaks in Mech. Rm.

INITIALS: WTT; DATE: 10-3

BUILDING HOT WATER GENERATOR SURVEY

1. Building Number: 3002
2. Building Name: Admin.
3. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ____; SEP ☒

4. Locate domestic hot water faucet:

- o Room Number: _____
- o Room Name: Mech. Rm.

Run hot water for 1 to 2 minutes.

Take sample of water.

Mark building number on sample.

5. Take temperature reading of hot water: N/A °F

6. Other observations or notes:

Elec. DHW

fair amount of

* Steam Flowing from HTWR flange above

Floor entry

* ~12 drop/min HTW leak from HTWR bypass valve

(control valve bypass line)

INITIALS: _____; DATE: _____

B.3 CEP AND SEP SURVEY FORMS

PUMP P-23 / P-24

HTW Distribution System

Fort Stewart, GA

CENTRAL ENERGY PLANT SURVEY - PUMPS

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ✓; SEP ____
2. Suction Pressure: 180 psi
3. Discharge Pressure: 220 psi
4. Motor kW (Measured): PH1 = ____; PH2 = ____; PH3 = ____
5. Pump Nameplate Data:

DEAN BROTHERS PUMPS, INC., INDIANAPOLIS, IN

SIZE 4x6x10'1, MODEL R454, SERIAL 132508

910 GPM, HEAD=300 FT, RPM=2300

Control Panel reads 2010 RPM for pump P-23

12 11 11 26 11 11 11 P-24

→ Diff. Pressure

6. Pump Motor Nameplate Data:

Lincoln, Dripproof, France - 404 TS, 125 hp, 230/460V

60 hz, ^{LINCOLN} CODE TV-3421, 3 Phase, 3495 RPM,

284/142 Amps, SF=1.15, SERIAL # 2434710, INS.=B,

NEMA EFF=89.5, Continuous, NEMA CODE=D, NEMA DESIGN=B

BEARINGS: Radial=6312, Thrust=7312 BG

7. Leaks or other observations:

PEERLESS HYDROCONSTANT VARIABLE SPEED PUMP DRIVE,

MODEL 2AM09A-361 25, SN # 405447

Backup pump leaks: 1 drop/3 sec from discharge valve
1 drop/1 sec from pump glands

INITIALS: WTT; DATE: 9-13-95

PUMP P-10 / (P-11)

HTW Distribution System

Fort Stewart, GA

CENTRAL ENERGY PLANT SURVEY - PUMPS

1. HTW Zone No.: 1 ____; 2N ☒; 2S ☒; 3 ____; SEP ____
2. Suction Pressure: 145 psi
3. Discharge Pressure: 220 psi
4. Motor kW (Measured): PH1 = ____; PH2 = ____; PH3 = ____
5. Pump Nameplate Data:

DEAN BROS. PUMPS, INC.

SIZE = 3x4x8 1/2, model R434, S#124895, Item #PH1,
370 GPM, 260 ft Head, 3500 RPM,

Bearings: Radial 6309, Thrust 7309RG

Control Panel reads ~ 2670 RPM for pump P-11?

6. Pump Motor Nameplate Data: 63.5 ^{diff pressure} P-10?
GOULD CENTURY MOTOR
Part# 6-320821-01, FRAME=324TS, TYPE=SC
50 HP, CODE=G, 60 HZ, 3 PH, 3540 RPM, 230/460 V,
116/58 AMPS, CONTINUOUS, SF=1.15, FORM=MCA, INS=B,
NEMA DESIGN=B, Serial Code=U9, CAT# 0609

7. Leaks or other observations:

peerless variable speed drive

Leaks: steady drip/stream from pump gland - P11
" " " " " " - P10

INITIALS: WTT; DATE: 9-13-95

P-4 / (P-5)

HTW Distribution System

Fort Stewart, GA

CENTRAL ENERGY PLANT SURVEY - PUMPS

1. HTW Zone No.: 1 ☒; 2N ____; 2S ____; 3 ____; SEP ____
2. Suction Pressure: 177 psi
3. Discharge Pressure: 245 psi
4. Motor kW (Measured): PH1 = ____; PH2 = ____; PH3 = ____
5. Pump Nameplate Data:

DEAN BROS. PUMPS, INC., SIZE 4x6x10 1

MODEL R454, S# 121621, ITEM # P-4?

900 GPM, 300 Ft head, 3500 RPM

Bearings: Rad = 6312, Thrust = 7312 BG

rad? s#?

Dif press = 64.7 or 55.0

6. Pump Motor Nameplate Data:

RELIANCE, FRAME=365TS, TYPE=P, INS. CLASS=B, 100 HP,

3540 RPM, DESIGN=B, CODE=F, 460V, 120A, 60 HZ

SF=1.15, CONTINUOUS, ID# P36G72C-G4-SB

7. Leaks or other observations:

PEERLESS VARIABLE SPEED DRIVE,

Leaks: 1 drop / 4 sec from pump gland of P-4

INITIALS: WTT; DATE: 9-13-95

SATELLITE ENERGY PLANT SURVEY - PUMPS

1. HTW Zone No.: 1 ____; 2N ____; 2S ____; 3 ____; SEP ☒
2. Suction Pressure: ____ psi
3. Discharge Pressure: 210 psig
4. Motor kW (Measured): PH1 = ____; PH2 = ____; PH3 = ____
5. Pump Nameplate Data:

Mfg. by Dean Bros.; Size: 4x6x10 / R454

Serial No.: 142716; 885 Gpm; 300 Ft Hd, 3500 RPM

Sp. Gravity = 0.859

SPEED REDUCER: Mfg by Peerless

output shaft speed = 310 RPM

6. Pump Motor Nameplate Data:

Frame: 404 TS

HP: 125

Volts: 230/460

Amps: 284/142

S.F.: 1.15

Speed: 3495 RPM

7. Leaks or other observations:

Pump need insulation

Pump. disc. press = 210 psig

Pump inlet temp = 380 °F

INITIALS: GF; DATE: _____

**Dean Pump Division**

P.O. BOX 68172, INDIANAPOLIS, IN 46268-0172, (317) 293-2930.

FAX (317) 297-7028 MARKETING/ENGINEERING

FACSIMILE MESSAGE COVER SHEETDATE: 9-15-95
TO: BILL TODD
R.S. & HFROM: JEFF FISHELTHIS MESSAGE IS: ROUTINE ☒ URGENT () PAGES (4)

BILL,

HERE ARE CURVES,

CALL WITH QUESTIONS,

BEST REGARDS,

JEFF FISHEL

09/15/95

11:59

317 297 7028

DEAN PUMP DIV.

004.004

ESTABLISHED 1869

DEAN BROTHERS PUMPS INC.
INDIANAPOLIS INDIANA

CENTRIFUGAL PUMP PERFORMANCE DATA: CURVE R-40100-A1

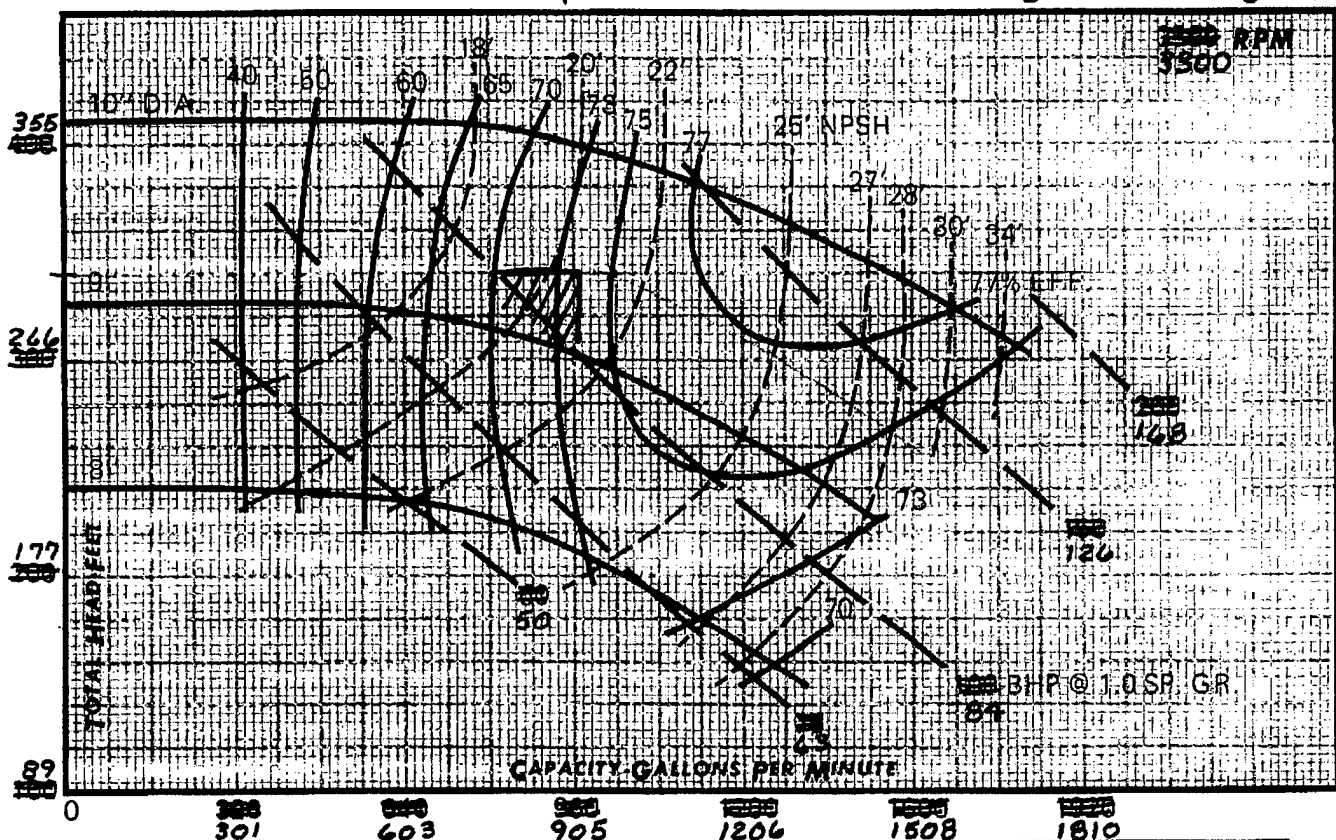
PUMP SIZE: 4" x 6" x 10"

SPECIAL

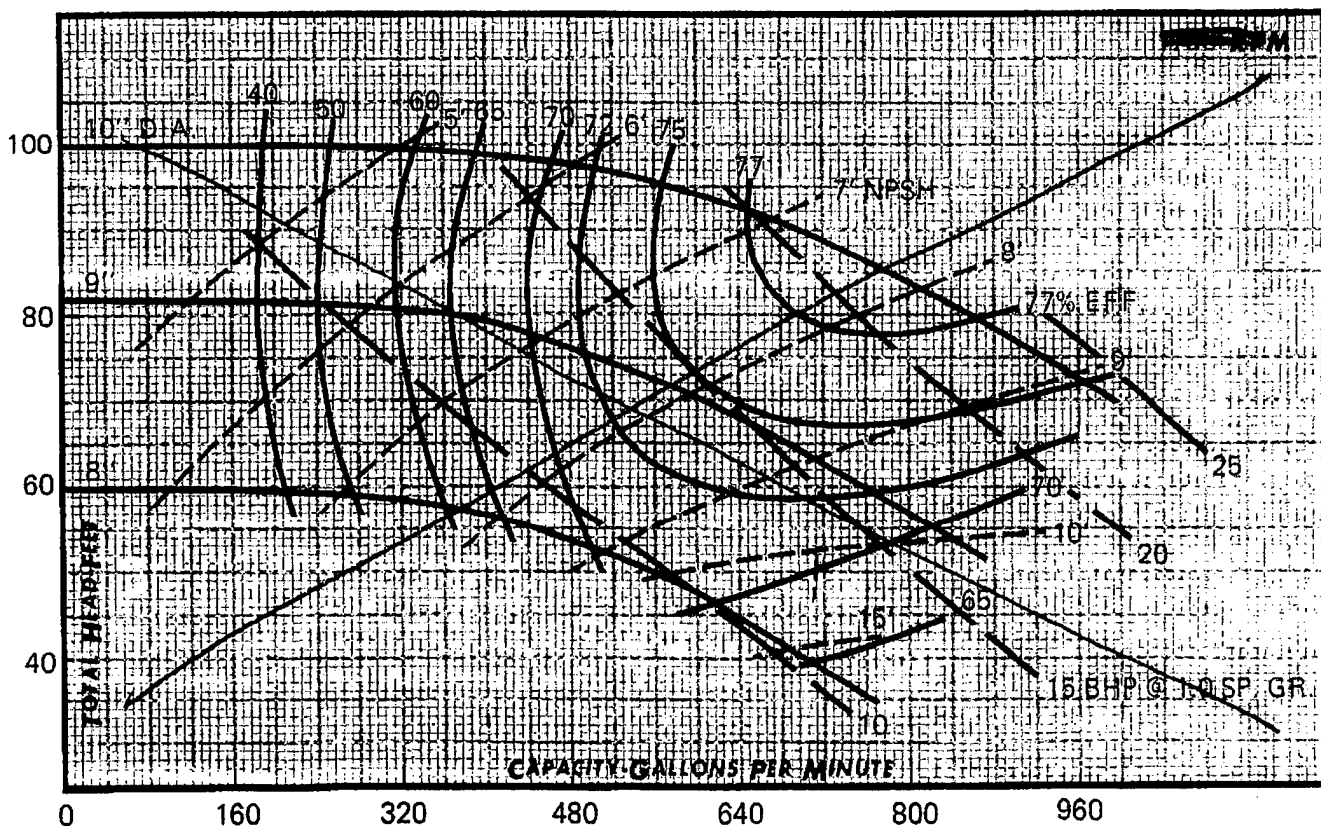
PUMP TYPE: R454

4" DISCHARGE x 6" SUCTION

PUMP PERFORMANCE: This curve, based on extensive tests, defines the average performance of this pump for liquids having a viscosity of 70 SSU or less. Actual performance of individual units may differ slightly from the performance indicated on this curve. Pump applications made from the data contained herein are subject to confirmation and acceptance by our Engineering Department at our Indianapolis Office.

CUSTOMER PYE-BARKER SUPPLY CO.CUSTOMER'S ORDER NO. 10811

ITEM NO.

DEAN BROTHERS PUMP SERIAL NO. 132507-8FACTORY ORDER NO. 19219

APPROVED BY J.W.R.

DATE ISSUED 12/30/75

CURVE R-40100-A1

ESTABLISHED 1869

DEAN BROTHERS PUMPS INC.
INDIANAPOLIS INDIANA

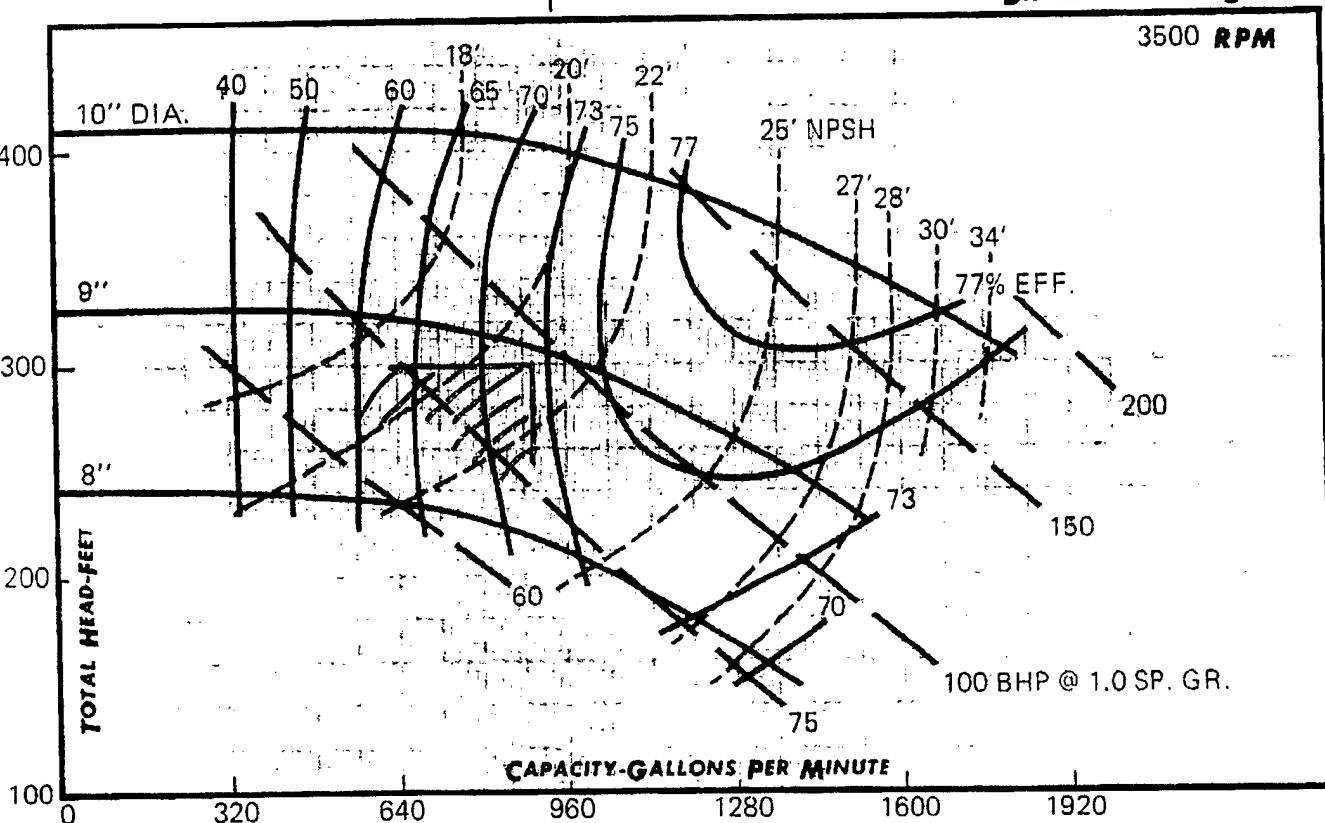
CENTRIFUGAL PUMP PERFORMANCE DATA: CURVE R-40100 A1

PUMP SIZE: 4" x 6" x 10"

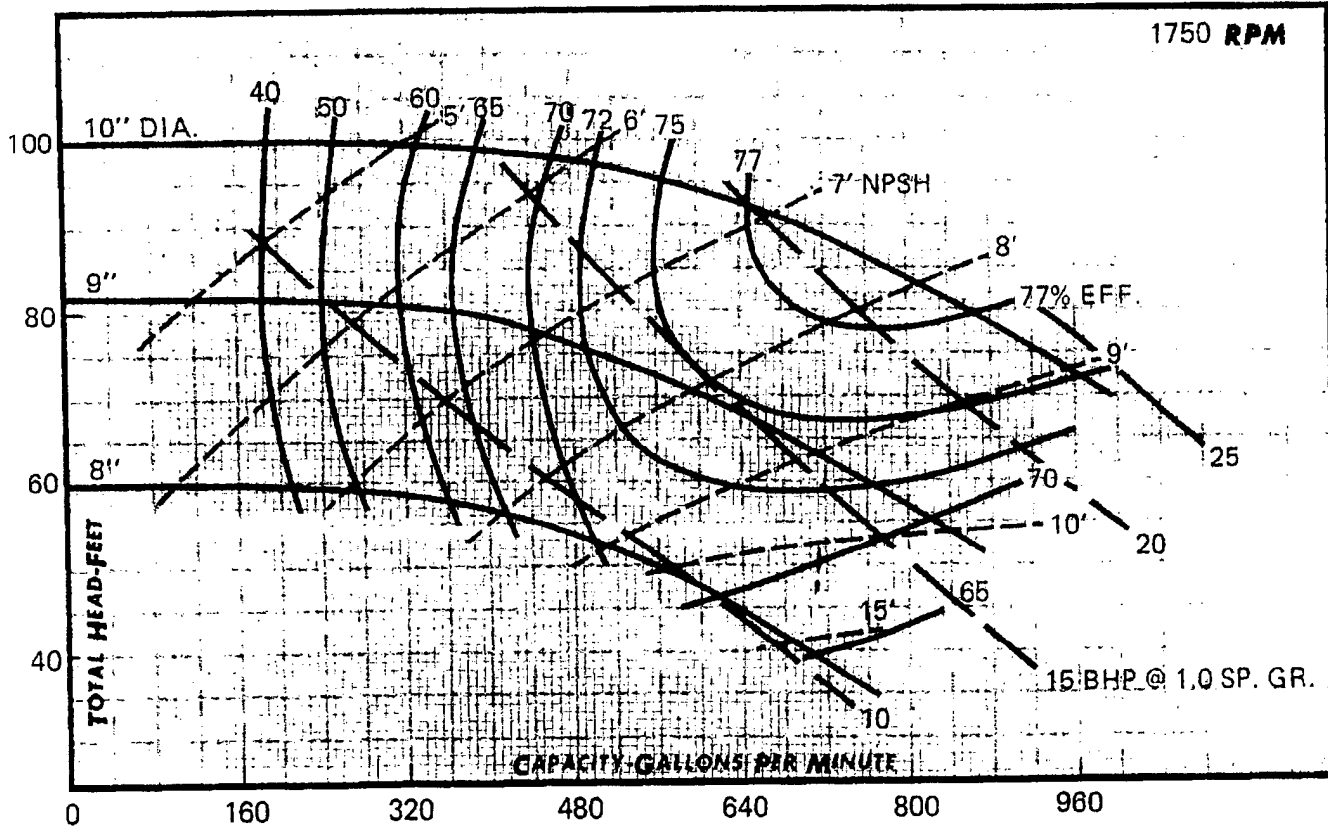
PUMP TYPE: R454

4" DISCHARGE X 6" SUCTION

PUMP PERFORMANCE: This curve, based on extensive tests, defines the average performance of this pump for liquids having a viscosity of 70 SSU or less. Actual performance of individual units may differ slightly from the performance indicated on this curve. Pump applications made from the data contained herein are subject to confirmation and acceptance by our Engineering Department at our Indianapolis Office.



CUSTOMER E.D. GREEN CORP
 CUSTOMER'S ORDER NO. XS-012776 ITEM No. P44 P-5
 DEAN BROTHERS PUMP SERIAL NO. 1216212 FACTORY ORDER NO. 10006



APPROVED BY J.W.R.

DATE ISSUED 12/30/75

CURVE R-40100-A1

09/15/95

11:53

317 297 7028

ESTABLISHED 1869

DEAN BROTHERS PUMPS INC.
INDIANAPOLIS INDIANA.

DEAN PUMP DIV.

003/004

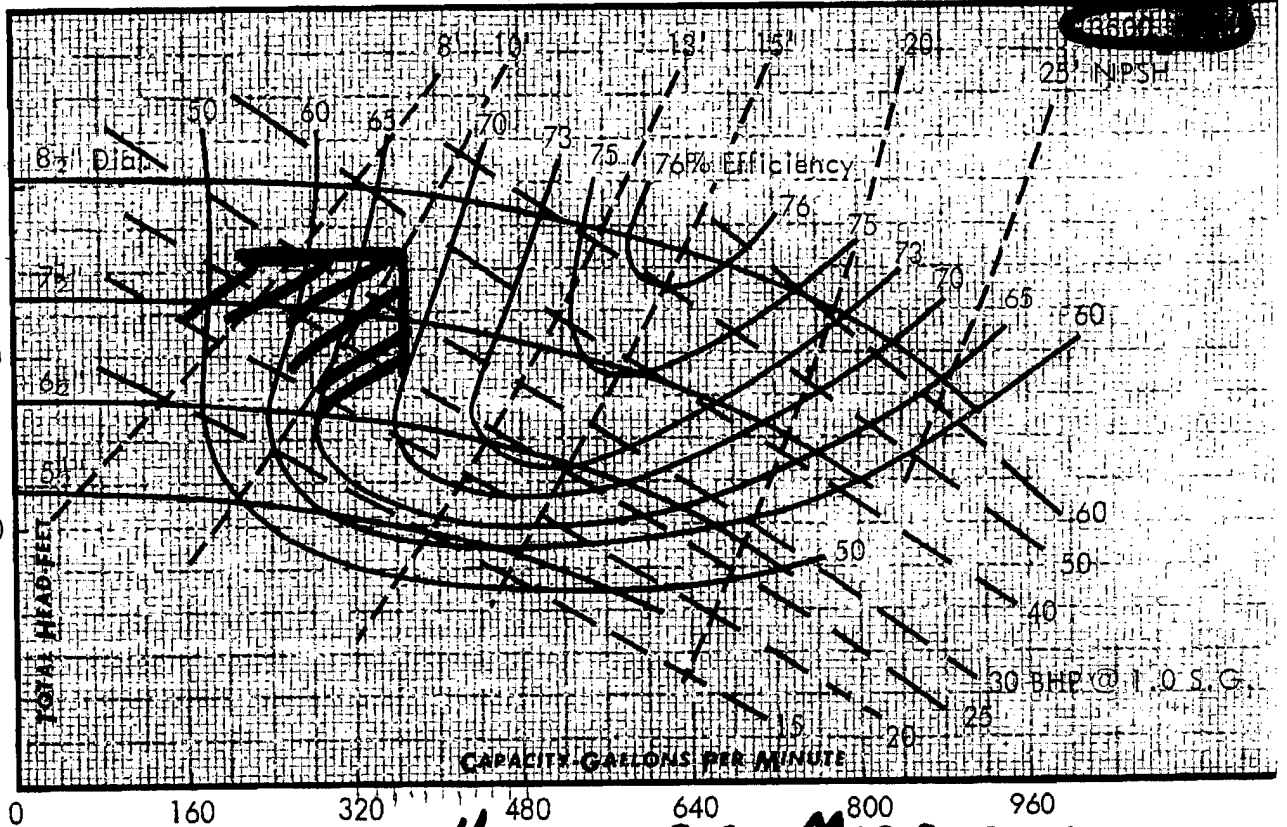
CENTRIFUGAL PUMP PERFORMANCE DATA: CURVE R 3085-A1

PUMP SIZE: 3" x 4" x 8½"

PUMP TYPE: R 434

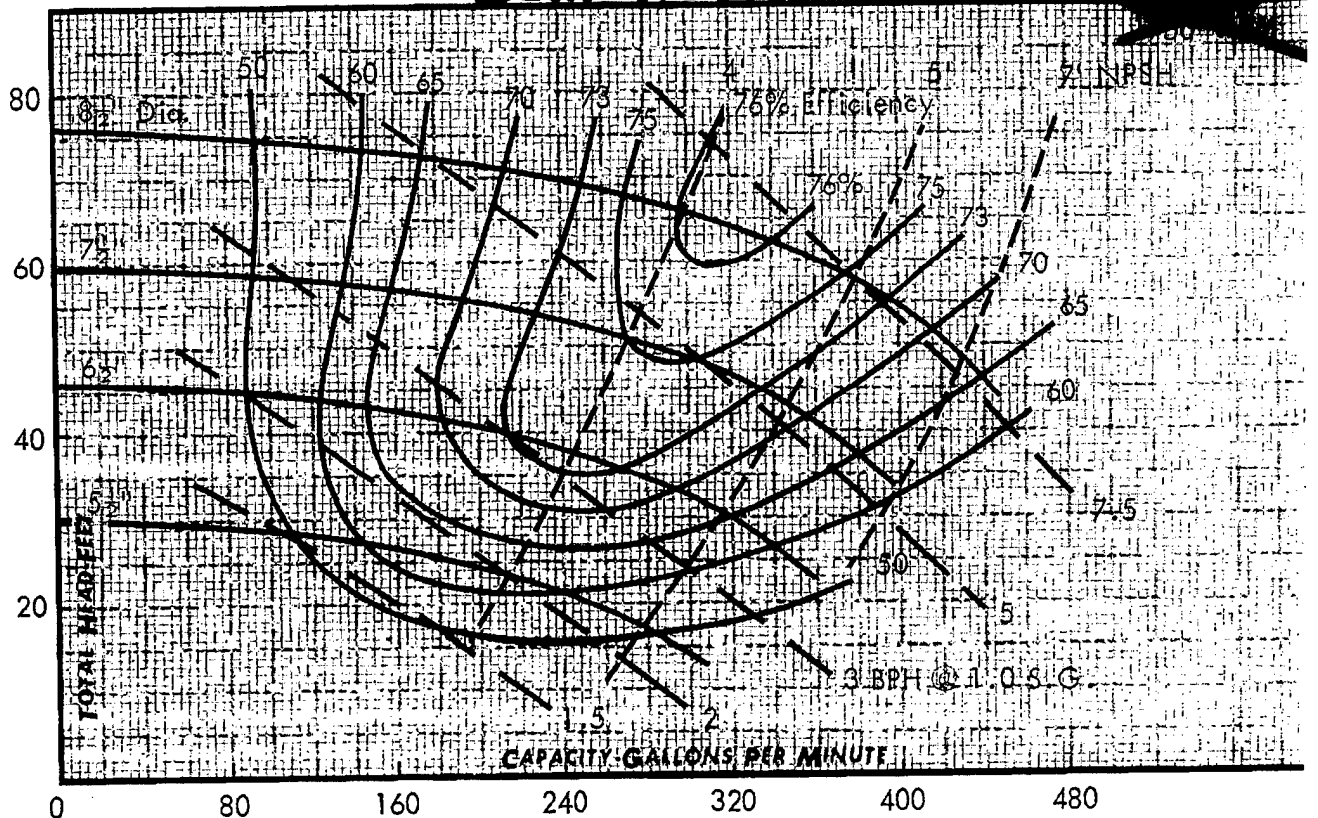
3" DISCHARGE X 4" SUCTION

PUMP PERFORMANCE: This curve, based on extensive tests, defines the average performance of this pump for liquids having a viscosity of 70 SSU or less. Actual performance of individual units may differ slightly from the performance indicated on this curve. Pump applications made from the data contained herein are subject to confirmation and acceptance by our Engineering Department at our Indianapolis Office.



HANWICK - MORRISON
PO. 4932

DEAN PO. 12921, SER. No. 12464-5



APPROVED BY

DATE ISSUED 7/6/65

CURVE R 3085-A1



Telephone Call Confirmation

Project Number 1331
694 ~~1331~~ 002

Local L.D. Placed Rec'd 11-21-95 Date 11-21-95

B. Todd
Conversed with Randy Parks or Ft. Stewart CEP

Regarding Start-up of the Satellite Energy Plant

They began start-up of the SEP on Monday (11/13/95).

A leak was discovered in a cascade "manhole" so the SEP was shut down while repairs were made. After starting the SEP again, another leak was discovered (a nipple at the SEP), and the SEP shut down again. Randy thinks (hopes) the SEP will be operational by next Monday (11/27/95).

Randy said they typically find about 2 leaks each year during the SEP start-up.

Distribution:



Telephone Call Confirmation

912 - 767 - 8931

Project Number 694 1331 002

Local (L.D.) (Placed) Rec'd 8-14-95 Date 8-14-95

B. Todd
Conversed with Randy Parks or Ft. Stewart CEP

Regarding Makeup water for the satellite energy plant (SEP)

The chillers at the SEP are not used so there is no make up water for the ~~the~~ CHW system.

The make up water for the SEP HTW distribution system comes from the CEP. There is no direct make up water system at the SEP. The water level in the cascade heaters is checked a few times each day. When the water level gets too low the CEP operators use the HTW return pipe to "back fill" the cascade heaters.

Distribution:

RS&H

SUBJECT SEP Pumps
DESIGNER _____
CHECKER _____

AEP NO _____
SHEET _____ OF _____
DATE _____
DATE _____

SEP PUMP DATA

SOUTH PUMP - NEEDS INSULATION

MFG R - DEAN BROS

SIZE - 4X6X10 1 R454

SER. NO. 142716

FLOW 885 gpm

HEAD 300 FC

SPEED 3500 RPM

SP. GRAV. 0.859

FRAME

HP

VOLT

AMPS

S.F.

SPEED

MOTOR

404TS

125

230/460

284/142

1.15

3495 RPM

SPEED REDUCER

MFG R - PEERLESS

OUTPUT SHAFT SPEED 310 RPM.

PUMP DISCH PRES. - 210 PSIG

" INLET TEMP - 380°F

CEP HTI CIRC. PUMPS.

MFG R - DEAN BROS.

SIZE - 4X6X10 1 R454

SER. NO. 132508

FLOW 910 gpm

HEAD 300 FC

SPEED 3300 RPM

SPEED REDUCER

PEERLESS - HYDRO CONSTANT.

PUMP DISCH. PRES. 225 PSIG

SUCT. " 190 PSIG

TEMP ? °F

B.4 HTW DISTRIBUTION SYSTEM SURVEY FORMS

LEAK DETECTION SURVEY LOG

Agency Name FORT STEWART Date 2-21-96
Leak Detection Team T. CONLEY, T. GUSTAFSON, B. GOLDSTON, B. TODD
Area Surveyed ZONE 1 BETWEEN DP-1-17/18 AND VP-1-18
Map Reference CENTRAL HEATING AND COOLING, DECEMBER 1990
Survey Equipment MODEL C-2000 CORRELATE, MFG. BY FCS
Pipe Material BLACK STEEL W/INSULATION AND STEEL CONDUIT
Pipe Diameter 2 inches
Type of Fluid HIGH TEMPERATURE WATER
Temperature of Fluid 380 (°F) or °C
Insulated ☒ Yes; ☐ No
Distance Between Listening Points 500 (Feet) or Meters
Listening Points Used:
Meters ☐; Hydrants ☐; Valves ☒; Test Rods ☐; Other ☐

Scan Time	Filter(s)	Point Height	Location
QUICK	ALL	NONE	N/A
FULL	ALL	NONE	N/A
FULL	ALL	NONE	N/A

Notes:

Slight steam flow from drain vent in DP-1-17/18.
Very heavy noise observed on detection equipment.
Sounds like fluid flow or boiling liquid, a steady
rushing sound. Same noise observed with hand held
S-20 model leak detector. No peaks found.

LEAK DETECTION SURVEY LOG

Agency Name FORT STEWART Date 2-21-96

Leak Detection Team T. CONLEY, T. GUSTAFSON, B. GOLDSTON, B. TODD

Area Surveyed ZONE 1 BETWEEN VP-1-17 AND DP-1-17/18

Map Reference CENTRAL HEATING AND COOLING, DECEMBER 1990

Survey Equipment MODEL C-2000 CORRELATE, MFG. BY FCS

Pipe Material BLACK STEEL W/ INSULATION AND STEEL CONDUIT

Pipe Diameter 2 inches

Type of Fluid HIGH TEMPERATURE WATER

Temperature of Fluid 380 (°F) or °C

Insulated ☒ Yes; ☐ No

Distance Between Listening Points 300 (Feet) or Meters

Listening Points Used:

Meters ____; Hydrants ____; Valves ☒; Test Rods ____; Other ____

Scan Time	Filter(s)	Point Height	Location
QUICK	ALL	NONE	N/A
FULL	ALL	NONE	N/A
FULL	ALL	NONE	N/A
FULL	ALL	NONE	N/A

Notes:

Same background noise as previous test. No peak
found. Check listening equipment on a nearby
fire hydrant - they were working properly.

LEAK DETECTION SURVEY LOG

Agency Name FORT STEWART Date 2-21-96

Leak Detection Team T. CONLEY, T. GUSTAFSON, B. GOLDSTON, B. TODD

Area Surveyed ZONE 1 BETWEEN VP-1-16 AND VP-1-17

Map Reference CENTRAL HEATING AND COOLING, DECEMBER 1990

Survey Equipment MODEL C-2000 CORRELATE, MFG. BY FCS

Pipe Material BLACK STEEL W/ INSULATION AND STEEL CONDUIT

Pipe Diameter 4 inches

Type of Fluid HIGH TEMPERATURE WATER

Temperature of Fluid 380 (°F) or °C

Insulated ☒ Yes; ☐ No

Distance Between Listening Points 500 (Feet) or Meters

Listening Points Used:

Meters ____; Hydrants ____; Valves ☒; Test Rods ____; Other ____

Scan Time	Filter(s)	Point Height	Location
QUICK	ALL	NONE	N/A
FULL	ALL	NONE	N/A

Notes:

There is a pin hole leak in a joint weld where
the HTW pipe enters VP-1-16. No leak detected
by the equipment. Same heavy background noise.

LEAK DETECTION SURVEY LOG

Agency Name FORT STEWART Date 2-21-96

Leak Detection Team T. CONLEY, T. GUSTAFSON, B. GOLDSTON, B. TODD

Area Surveyed ZONE 1 BETWEEN VP-1-15 AND VP-1-16

Map Reference CENTRAL HEATING AND COOLING, DECEMBER 1990

Survey Equipment MODEL C-2000 CORRELATE, MFG. BY FCS

Pipe Material BLACK STEEL W/ INSULATION AND STEEL CONDUIT

Pipe Diameter 4 inches

Type of Fluid HIGH TEMPERATURE WATER

Temperature of Fluid 380 (°F) or °C

Insulated ☒ Yes; ☐ No

Distance Between Listening Points 400 (Feet) or Meters

Listening Points Used:

Meters ____; Hydrants ____; Valves ☒; Test Rods ____; Other ____

Scan Time	Filter(s)	Point Height	Location
FULL	ALL	NONE	N/A

Notes:

Same background noise, no leak detected.

LEAK DETECTION SURVEY LOG

Agency Name FORT STEWART Date 2-21-96

Leak Detection Team T. CONLEY, T. GUSTAFSON, B. GOLDSTON, B. TODD

Area Surveyed ZONE 1 BETWEEN VP-1-14 AND VP-1-15

Map Reference CENTRAL HEATING AND COOLING, DECEMBER 1990

Survey Equipment MODEL C-2000 CORRELATE, MFG. BY FCS

Pipe Material BLACK STEEL W/ INSULATION AND STEEL CONDUIT

Pipe Diameter 6 inches

Type of Fluid HIGH TEMPERATURE WATER

Temperature of Fluid 380 (°F) or °C

Insulated ☒ Yes; ☐ No

Distance Between Listening Points 400 (Feet) or Meters

Listening Points Used:

Meters ____; Hydrants ____; Valves ☒; Test Rods ____; Other ____

Scan Time	Filter(s)	Point Height	Location
FULL	ALL	NONE	N/A

Notes:

Same background noise, no leak detected.

LEAK DETECTION SURVEY LOG

Agency Name FORT STEWART Date 2-21-96

Leak Detection Team T. CONLEY, T. GUSTAFSON, B. GOLDSTON, B. TODD

Area Surveyed ZONE 1 BETWEEN VP-1-13 AND DP-1-13

Map Reference CENTRAL HEATING AND COOLING, DECEMBER 1990

Survey Equipment MODEL C-2000 CORRELATE, MFG. BY FCS

Pipe Material BLACK STEEL W/ INSULATION AND STEEL CONDUIT

Pipe Diameter 4 inches

Type of Fluid HIGH TEMPERATURE WATER

Temperature of Fluid 380 (°F) or °C

Insulated ☒ Yes; ☐ No

Distance Between Listening Points 250 (Feet) or Meters

Listening Points Used:

Meters ____; Hydrants ____; Valves ☒; Test Rods ____; Other ____

Scan Time	Filter(s)	Point Height	Location
FULL	ALL	NONE	N/A

Notes:

Same background noise, no leak detected

LEAK DETECTION SURVEY LOG

Agency Name FORT STEWART Date 2-21-96

Leak Detection Team T. CONLEY, T. GUSTAFSON, B. GOLDSTON, B. TODD

Area Surveyed ZONE 1 BETWEEN VP-1-9 AND VP-1-10

Map Reference CENTRAL HEATING AND COOLING, DECEMBER 1990

Survey Equipment MODEL C-2000 CORRELATE, MFG. BY FCS

Pipe Material BLACK STEEL W/ INSULATION AND STEEL CONDUIT

Pipe Diameter 8 inches

Type of Fluid HIGH TEMPERATURE WATER

Temperature of Fluid 380 (°F) or °C

Insulated ☒ Yes; ☐ No

Distance Between Listening Points 400 (Feet) or Meters

Listening Points Used:

Meters ____; Hydrants ____; Valves ☒; Test Rods ____; Other ____

Scan Time	Filter(s)	Point Height	Location
FULL	ALL	NONE	N/A

Notes:

Same background noise, no leak detected.

LEAK DETECTION SURVEY LOG

Agency Name FORT STEWART Date 2-21-96

Leak Detection Team T. CONLEY, T. GUSTAFSON, B. GOLDSTON, B. TODD

Area Surveyed ZONE 1 BETWEEN VP-1-B AND VP-1-10

Map Reference CENTRAL HEATING AND COOLING, DECEMBER 1990

Survey Equipment MODEL C-2000 CORRELATE, MFG. BY FCS

Pipe Material BLACK STEEL W/ INSULATION AND STEEL CONDUIT

Pipe Diameter 8 inches

Type of Fluid HIGH TEMPERATURE WATER

Temperature of Fluid 380 (°F) or °C

Insulated ☒ Yes; ☐ No

Distance Between Listening Points 700 (Feet) or Meters

Listening Points Used:

Meters ____; Hydrants ____; Valves ☒; Test Rods ____; Other ____

Scan Time	Filter(s)	Point Height	Location
FULL	ALL	NONE	N/A

Notes:

Same background noise, no leaks detected.

LEAK DETECTION SURVEY LOG

Agency Name FORT STEWART Date 2-21-96

Leak Detection Team T. CONLEY, T. GUSTAFSON, B. GOLDSTON, B. TODD

Area Surveyed ZONE 1 BETWEEN VP-1-7 AND VP-1-10

Map Reference CENTRAL HEATING AND COOLING, DECEMBER 1990

Survey Equipment MODEL C-2000 CORRELATE, MFG. BY FCS

Pipe Material BLACK STEEL W/ INSULATION AND STEEL CONDUIT

Pipe Diameter 8 inches

Type of Fluid HIGH TEMPERATURE WATER

Temperature of Fluid 380 (°F) or °C

Insulated ☒ Yes; ☐ No

Distance Between Listening Points 1020 (Feet) or Meters

Listening Points Used:

Meters ____; Hydrants ____; Valves ☒; Test Rods ____; Other ____

Scan Time	Filter(s)	Point Height	Location
FULL	ALL	NONE	N/A

Notes:

Same background noise, no leaks detected.

LEAK DETECTION SURVEY LOG

Agency Name FORT STEWART Date 2-21-96

Leak Detection Team T. CONLEY, T. GUSTAFSON, B. GOLDSTON, B. TODD

Area Surveyed ZONE 2 BETWEEN VP-2N-8 AND VP-2N-9

Map Reference CENTRAL HEATING AND COOLING, DECEMBER 1990

Survey Equipment MODEL C-2000 CORRELATE, MFG. BY FCS

Pipe Material BLACK STEEL W/ INSULATION AND STEEL CONDUIT

Pipe Diameter 2 1/2 inches

Type of Fluid HIGH TEMPERATURE WATER

Temperature of Fluid 380 °F or °C

Insulated ☒ Yes; ☐ No

Distance Between Listening Points 300 Feet or Meters

Listening Points Used:

Meters ____; Hydrants ____; Valves ☒; Test Rods ____; Other ____

Scan Time	Filter(s)	Point Height	Location
FULL	ALL	NONE	N/A

Notes:

Tested here because there were no suspected leaks
and far from CEP. Still had severe background
noise.

LEAK DETECTION SURVEY LOG

Agency Name FORT STEWART Date 2-21-96

Leak Detection Team T. CONLEY, T. GUSTAFSON, B. GOLDSTON, B. TODD

Area Surveyed ZONE 3 BETWEEN VP-3-11 AND VP-3-12

Map Reference CENTRAL HEATING AND COOLING, DECEMBER 1990

Survey Equipment MODEL C-2000 CORRELATE, MFG. BY FCS

Pipe Material BLACK STEEL W/ INSULATION AND STEEL CONDUIT

Pipe Diameter 8 inches

Type of Fluid HIGH TEMPERATURE WATER SUPPLY

Temperature of Fluid 380 (°F) or °C

Insulated ☒ Yes; ☐ No

Distance Between Listening Points 500 (Feet) or Meters

Listening Points Used:

Meters ____; Hydrants ____; Valves ☒; Test Rods ____; Other ____

Scan Time	Filter(s)	Point Height	Location
FULL	ALL	NONE	N/A

Notes:

Clanging noise in this pipe - probably due to water
hammer from groundwater coming in contact with
the HTW pipe, Probable Conduit leak here.

LEAK DETECTION SURVEY LOG

Agency Name FORT STEWART Date 2-21-96

Leak Detection Team T. CONLEY, T. GUSTAFSON, B. GOLDSTON, B. TODD

Area Surveyed ZONE 3 BETWEEN VP-3-11 AND VP-3-12

Map Reference CENTRAL HEATING AND COOLING, DECEMBER 1990

Survey Equipment MODEL C-2000 CORRELATE, MFG. BY FCS

Pipe Material BLACK STEEL W/ INSULATION AND STEEL CONDUIT

Pipe Diameter 8 inches

Type of Fluid HIGH TEMPERATURE WATER RETURN

Temperature of Fluid 380 (°F) or °C

Insulated ☒ Yes; ☐ No

Distance Between Listening Points 500 (Feet) or Meters

Listening Points Used:

Meters ☐; Hydrants ☐; Valves ☒; Test Rods ☐; Other ☐

Scan Time	Filter(s)	Point Height	Location
FULL	ALL	NONE	N/A

Notes:

About 1 to 2 GPM of ground water is leaking into
VP-3-11 from around conduits.

LEAK DETECTION SURVEY LOG

Agency Name FORT STEWART Date 2-21-96
 Leak Detection Team T. CONLEY, T. GUSTAFSON, B. GOLDSTON, B. TODD
 Area Surveyed SEP ZONE BETWEEN VP-S-12 AND VP-S-13
 Map Reference CENTRAL HEATING AND COOLING, DECEMBER 1990
 Survey Equipment MODEL C-2000 CORRELATE, MFG. BY FCS
 Pipe Material BLACK STEEL W/ INSULATION AND STEEL CONDUIT
 Pipe Diameter 3 inches
 Type of Fluid HIGH TEMPERATURE WATER SUPPLY
 Temperature of Fluid 380 (°F) or °C
 Insulated ☒ Yes; ☐ No
 Distance Between Listening Points 800 (Feet) or Meters
 Listening Points Used:
 Meters ____; Hydrants ____; Valves ☒; Test Rods ____; Other ____

Scan Time	Filter(s)	Point Height	Location
QUICK	ALL	NONE	N/A
FULL	ALL	PEAK	620'-660' from ^{VP-S} -12
FULL	ALL	NONE	N/A
FULL	ALL	NONE	N/A

Notes:

There is a pin hole leak in the pipe joint in
 VP-S-12. Slight steam flow from conduit vent in
 VP-S-13. Heavy background noise, did not detect
 visible pinhole leak, peak found during one
 scan was not repeatable.

LEAK DETECTION SURVEY LOG

Agency Name FORT STEWART Date 2-21-96
 Leak Detection Team T. CONLEY, T. GUSTAFSON, B. GOLDSTON, B. TODD
 Area Surveyed SEP ZONE BETWEEN VP-S-12 AND VP-S-13
 Map Reference CENTRAL HEATING AND COOLING, DECEMBER 1990
 Survey Equipment MODEL C-2000 CORRELATE, MFG. BY FCS
 Pipe Material BLACK STEEL W/ INSULATION AND STEEL CONDUIT
 Pipe Diameter 3 inches
 Type of Fluid HIGH TEMPERATURE WATER RETURN
 Temperature of Fluid 380 (°F) or °C
 Insulated ☒ Yes; ☐ No
 Distance Between Listening Points 800 (Feet) or Meters
 Listening Points Used:
 Meters ☐; Hydrants ☐; Valves ☒; Test Rods ☐; Other ☐

Scan Time	Filter(s)	Point Height	Location
QUICK	ALL	NONE	N/A
FULL	ALL	NONE	N/A

Notes:

Heavy background noise, points scattered, no peak.

