Station 15

JAN 14 2000 (21) **ENGINEERING DATA TRANSMITTAL**

HMDY0051 102038/AJ60

Page 1 of 1 KN

1. EDT 615972

2. To: (Receiving Organization) Distribution	3. From: (Originating Organization) B. C. Harmon	4. Related EDT No.: N/A
5. Proj./Prog./Dept./Div.: Project L-286	6. Design Authority/Design Agent/Cog. Engr.: Gary Stevens/Kirt Bare/BC Harmon	7. Purchase Order No.: N/A
		9. Equip./Component No.: N/A
8. Originator Remarks: For Release & Distribution Only. This document is being released into the Hanford System as a formal record (ATR) of the acceptance testing that was performed on Project L-286.		10. System/Bldg./Facility: Hanford Water Sys 283W
		12. Major Assm. Dwg. No.: N/A
11. Receiver Remarks:	11A. Design Baseline Document? ◯ Yes ● No BC 1/12/00	13. Permit/Permit Application No.: N/A
		14. Required Response Date: 1/31/00

15. DATA TRANSMITTED

(A) Item No.	(B) Document/Drawing No.	(C) Sheet No.	(D) Rev. No.	(E) Title or Description of Data Transmitted	(F) Approval Designator	(G) Reason for Transmittal	(H) Originator Disposition	(I) Receiver Disposition
1	HNF-4524	N/A	0	Acceptance Test Record	N/A	2	1	1

16. KEY

Approval Designator (F)	Reason for Transmittal (G)	Disposition (H) & (I)
E, S, Q, D OR N/A (See WHC-CM-3-5, Sec. 12.7)	1. Approval 2. Release 3. Information 4. Review 5. Post-Review 6. Dist. (Receipt Acknow. Required)	1. Approved 2. Approved w/comment 3. Disapproved w/comment 4. Reviewed no/comment 5. Reviewed w/comment 6. Receipt acknowledged

17. SIGNATURE/DISTRIBUTION (See Approval Designator for required signatures)

(G) Reason	(H) Disp.	(J) Name	(K) Signature	(L) Date	(M) MSIN	(G) Reason	(H) Disp.	(J) Name	(K) Signature	(L) Date	(M) MSIN
		Design Authority	~~G.M. Stevens~~ BC	N/A	T2-11			T.L. Sweet			T2-11
		Design Agent	K.D. Bare		G3-08			S.G. Romero			B2-67
2	1	Cog. Eng.	B.C. Harmon	1-11-00	G3-08			G. S. Carpenter			B2-67
2	1	Cog. Mgr.	D.J. Tollefson	1/11/00	G3-08	2	1	J.L. Day		1-12-00	T2-11
		QA	N/A					A.L. McPherson			T2-11
		Safety	N/A					T. L. Clarke			N1-29
		Env.	N/A					Central Files			B1-07

18.	19.	20.	21. DOE APPROVAL (if required)
Signature of EDT Originator — Date 1-11-00	Authorized Representative for Receiving Organization — Date	Design Authority/ Cognizant Manager — Date 1/11/00	Ctrl No. ◯ Approved ◯ Approved w/comments ◯ Disapproved w/comments

BD-7400-172-2 (10/97)

BD-7400-172-1

DISTRIBUTION SHEET

To	From	Page 1 of 1
Distribution	B. C. Harmon	Date 01/14/2000
Project Title/Work Order		EDT No. 615972
L-286 HNF-4524, Rev. 0 "Acceptance Test Record"		ECN No.

Name	MSIN	Text With All Attach.	Text Only	Attach./ Appendix Only	EDT/ECN Only
K. D. Bare	G3-08	X			
G. S. Carpenter	B2-67	X			
T. L. Clarke	N1-29	X			
D. A. Danch	G3-07				X
J. L. Day	T2-11	X			
B. C. Harmon	G3-08	X			
A. L. McPherson	T2-11	X			
S. G. Romero	B2-67	X			
G. M. Stevens	T2-11	X			
T. L. Sweet	T2-11	X			
D. J. Tollefson	G3-08	X			
Central Files	B1-07	X			
DOE-RL Reading Room	H2-53	X			

S

L-286, Acceptance Test Record

B. C. Harmon
Fluor Federal Services
Richland, WA 99352
U.S. Department of Energy Contract DE-AC06-96RL13200

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Key Words: Wonderware*, CCAD, SIMCART, Water Plant, 283W, Instrumentation, Control Room, CATS, L-286, Acceptance Test Record.

*Wonderware is a trademark of Wonderware Corporation, Irvine, CA.

Abstract: This document provides a detailed account of how the acceptance testing was conducted for Project L-286, "200E Area Sanitary Water Plant Effluent Stream Reduction". The testing of the L-286 instrumentation system was conducted under the direct supervision of FDH A/I. This new automation & control system was installed to improve the overall efficiency while streamlining the manpower requirements that are required for the operation of the 200 Area Water Treatment Plants.

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DATE:
STA: 15
HANFORD RELEASE
ID: 21

Karen A. Noland 1/14/2000
Release Approval Date Release Stamp

Approved For Public Release

ACCEPTANCE TEST PROCEDURE

ACCEPTANCE TEST PROCEDURE HNF-4524

TEST TITLE L-286, Instrumentation System Acceptance Testing

LOCATION 200 East Area and 200 West Area

PROJECT NUMBER L-286 TASK ORDER 65100431/28/04

PROJECT TITLE L-286, 200 Area Sanitary Water Plant Effluent Stream Reduction

Prepared By

APPROVED FOR CONSTRUCTION

Fluor Daniel Northwest
Richland, Washington

For Dyncorp Hanford Company
Contract 65100431

PROCEDURE APPROVAL

Fluor Daniel Northwest (FNDW)

G. S. Carpenter, Author	5/14/99 Date	N/A Technical Documents	— Date
B. H. Nguyen, Checker	5/15/99 Date	N/A Safety	— Date
N/A Environmental	— Date	N/A Quality Engineering	— Date
B. C. Harmon, Project Mgmt.	5/14/99 Date	S. G. Romero, Prin. Lead Eng.	5/14/99 Date

Dyncorp (DYN)

Daniel A. Daniel Program Manager	5/14/99 Date	Tony McPhee Samuel L. Campbell Operations Maintenance	5/15/99 5/15/99 Date
Thomas Sweet Operations Engineering	5/14/99 Date	James Young Operations Manager	5-15-99 Date

ACCEPTANCE TEST PROCEDURE

EXECUTION AND TEST APPROVAL

EXECUTED BY

Reference ATP Sections For All Signatures in this Section. BCH

Ops. Test Director/Org.	Date	FDNW Test Director/Org.	Date
			1-6-00

Reference ATP Signatures For All Signatures in this Section - BCH

Recorder/Organization	Date	Test Operator/Organization	Date
			1-6-00

WITNESSES

Reference ATP Sections For All Signatures in This Section. BCH

Witness/Organization	Date	FDH A/I Inspector	Date
			1-6-00

Reference ATP Sections For all Signatures in this Section - BCH

Witness/Organization	Date
	1-6-00

A-E APPROVAL

Fluor Daniel Northwest (FDNW)

Without Exceptions	With Exceptions Resolved	With Exceptions Outstanding
X		

Project Manager	Date	Lead Design Engineer	Date
Brian C. Hansen	1-6-00	Brian C. Hansen For Steve Romero	1-6-00

ACCEPTANCE/INSPECTION

Fluor Daniel Hanford (FDH)

FDH A/I Inspector	Date
G. K. Clarke	01/06/00

TEST APPROVAL AND ACCEPTANCE

Dyncorp (DYN)

Without Exceptions	With Exceptions Resolved	With Exceptions Outstanding
✓		

	Date		Date
James Dang	1-12-00	D. A. Daniels Landlord Project, Technical Lead	1/12/00
N/A BCH	1-12-00	N/A BCH	1-12-00

ACCEPTANCE TEST PROCEDURE

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ACCEPTANCE TEST PROCEDURE

1. GENERAL

1.1 Scope

This test procedure provides instructions for acceptance testing of the Water Treatment Plant control system. The functional test areas that will be verified are listed below:

- Interconnection wiring terminations at the instrumentation and the PLC cabinet.
- Performance of equipment being controlled by the system.
- Validation of the HMI display of values at each of the control rooms.
- Validation of the instrumentation signal ranges.
- Validation of the network communications via HMI in 200W and 200E and operation of the control system from each node.

1.2 References

Documents:

HNF-SD-L286-TR-001, Rev. F: Project L-286 200 West and East Water Treatment Plant Control Systems Upgrade Description of Operations & Implementing Strategy Document.
HNF-4397, Rev. D: 200 West and East Water Treatment Plant Control Systems Upgrade Quality Test Procedure (QTP).

Drawings:

H-2-827239, Sheet 1, Rev. 0.
H-2-817849, Sheet 1, Rev. 1.
H-2-817849, Sheet 2, Rev. 0.
H-2-829272, Sheet 1 through 6, Rev. 0.
H-2-829270, Sheets 1 through 21, Rev. 0.

1.3 Responsibilities

1.3.1 General

Each company or organization participating in this ATP will designate personnel to assume the responsibilities and duties as defined herein for their respective roles. The designees shall become familiar with this ATP and the systems involved to the extent that they can perform their assigned duties.

1.3.2 Project Engineer

- Acts as liaison between the participants in acceptance testing.
- Distributes the testing schedule before start of testing as required.
- Ensures all participants sign the ATP Test Parties sheet.
- Signs Passing and Exception Reports for each test when approved and accepted.
- Takes necessary action to clear exceptions to the test.

1.3.3 Test Directors

- One Test Director shall manage the plant operation during the ATP.
- One Test Director shall manage the control system hardware during the ATP.
- Ensures labor, equipment, and test instruments required for performing tests have been provided as required.
- Coordinates and directs acceptance testing.
- Schedules and conducts a pretest kickoff meeting with test participants when necessary.
- Notifies the persons supporting the test 2 days before the start of testing.
- Notifies concerned parties when a change is made in the testing schedule.
- Confirms that field testing and inspection of the system or portion of the system to be tested has been completed.
- Stops any test which, in his or her judgement, may cause damage to the system until the problem has been resolved.
- Confirms that all equipment required for performing test will be available at the start of testing.

- After verifying there is no adverse impact, may alter the sequence in which systems or subsystems are tested (ref. Item no. 1.6).
- Ensures that required environmental conditions are maintained.
- If a test is to be suspended for a period of time, ensures that the system is left in a safe mode.
- Before restarting suspended test, reverifies the test prerequisites (ref. Item no. 1.8).
- Initiates redlines to document required changes to the ATP (ref. Item no. 1.5).
- Reviews recorded data, discrepancies, and exceptions.
- Obtains information or changes necessary to clear or resolve exceptions during the performance of the test (ref. Item no. 1.7).
- Signs Test Approval page when test has been completed (ref. Item no. 9.0).
- Obtains required signatures on the ATP Master prior to reproduction and distribution.

1.3.4 Witnesses (Provided by Participating Organizations. One witness shall be a FDH A/I acceptance inspector.)

- Witness the test.
- Review results of testing and signs acceptance of the Passing and Exceptions Reports.
- Assist the Test Director when requested.
- Stops any test which, in his or her judgement, may cause damage to the system until the problem has been resolved.
- FDH A/I acceptance inspector shall sign the Test Approval page when the test has been performed.

1.3.5 Recorder – FDNW

- Records on a data sheet test instrument identification numbers and calibration expiration dates, as required.

- Ensures that each section's Pass and Exception Reports are printed at the end of each section of testing.
- Verifies that the Pass and Exception Reports are accurate and signs at the end of each report for verification.
- Transmits the completed and verified reports to the Test Director for approval signature routing.

1.3.6 Test Operator

- Performs test under direction of the Test Director.
- Stops any test which, in his or her judgement, may cause damage to the system until the problem has been resolved.

1.3.7 Lead Design Engineer (FDNW CCAD)

- Evaluate results.
- Reviews the need for any changes and approves those determined to be needed (ref. Item no. 1.5)
- Sign for Approval on Test Approval page.

1.4 Description of the System

For a complete description of the system refer to the Project L-286 200 West and East Water Treatment Plant Control Systems Upgrade Description of Operations & Implementing Strategy Document (HNF-SD-L286-TR-001, Rev. F).

1.5 Change Control

If a need for a test procedure change is discovered in the course of running the test, the Test Director with concurrence from the Lead Design Engineer, may make changes by clearly crossing out and marking up the procedure. There is no requirement to issue a DCN to approve these changes. The marked up and completed test procedure is the final test record. Acceptance of the test results as marked up or otherwise noted approves the procedure changes.

If, in the course of conducting tests, it is discovered that a design change is required, a DCN shall be prepared to document and authorize the facility configuration change. The need for a design change shall be considered a test exception and shall be documented and dispositioned using the exception form described in Section 1.7.

Sections 3, 4 and 5 will be added via the standard DCN process.

1.6 Execution

1.6.1 Occupational Safety and Health

Individuals shall carry out their assigned work in a safe manner to protect themselves and others from undue hazards and to prevent damage to property and environment. Facility line managers shall assure the safety of activities within their areas to prevent injury, property damage, or interruption of operation. Performance of test activities shall always include safety and health aspects. A pre-job safety meeting shall be held and this ATP discussed with the personnel supporting the test.

In order to accomplish the work in this ATP, it is necessary to have the equipment and circuits energized. Complete testing requires installation and removal of jumpers to 24 VDC and 115 VAC circuits. Verification of no exposed voltages above 125 volts in the area of installation and removal of jumpers is required, unless a Hot Work permit has been put in place for the activity.

1.6.2 Energizing Equipment and Instrumentation

Plant instruments and equipment are to be energized (de-energized) at the discretion of the Test Director and the Plant Engineer.

If a piece of equipment fails or does not perform as designated by this document, the Test Director may move to another part of this procedure or another piece of equipment to continue testing while troubleshooting and repair is completed on the failed or unsatisfactory equipment.

1.7 Exceptions

1.7.1 Non-automated Testing Exceptions.

Exceptions to the required test results which are not recorded by the Test Logic are to be sequentially numbered and recorded on exception forms.

Number each exception sequentially as it occurs and record it on the exception form (ref. Item no. 7).

Enter disposition to resolve each exception when such determination is made.

1.7.2 Automated Testing Exceptions

Each test case shall be run and documented (including entries in the SIMCart test log, Passing Reports and Exception Reports (if any)). The results of each test must meet criteria set out in the test case datatable or revised datatable criteria based on the results of initial tests.

Exceptions to the required test results are uniquely identified and recorded on individual entries in a SIMCart Exception Report. This enables case-by-case resolution and approval of each exception.

Exceptions found in the WCS HMI, once released for operational use, falls entirely within the configuration control procedures in the WCS SCMP (refer to DOO). Exceptions to PLC functionality may require ECNs to effect changes in the hardware configuration. See section 1.6, CHANGE CONTROL, for a description of exception handling in the test document itself.

RECORDING

1.7.2.1 Each exception will be uniquely identified as it occurs and recorded on SIMCart exception report printouts.

1.7.2.2 The name of the SIMCart test operator and test witness, during exception generation, shall be listed for each exception.

1.7.2.3 Enter planned action to resolve each exception when such determination is made. Make this entry onto the original exception report 1) via comment entered through the SIMCart at the time of the exception, 2) in ink on the exception report printout, or 3) reference an attachment in ink on this printout.

RETEST/RESOLUTION

Record the action taken to resolve each exception. Actions actually taken may differ from planned action, but any changes must be noted.

SJR 7/11/99

Retests can be done either via the Cats engine or manually on a test case step by step basis. If the retest is done via the CATS engine and the step passes, the test case is noted on the existing hard-copy Exception report and initialed by the test participant. SJR 7/11/99

If Retests are done manually, the step resolution

1.7.2.4 An Exception Report shall generate a need to retest a functional area. These Reports are kept in the log. If the actions taken result in an acceptable retest, the next Exception Report generated shall have that test case/step(s) removed from the Exception report. ~~However, you may refer to earlier Exception Reports to see the progression of system testing and Exception remediation~~.

1.7.2.5 When action taken does not involve an acceptable retest, the CATS engine keeps the test case item on the Exception report.

APPROVAL AND ACCEPTANCE

The Test Director provides final approval and acceptance of exceptions by marking one of the following on SIMCart exception report item (in ink):

1.7.2.6 Retest Approved and Accepted (or RAA): Applicable when Retest Execution and Acceptance section is completed.

1.7.2.7 Exception Accepted-As-Is (or EAA): Requires detailed explanation.

1.7.2.8 Other (or O): Requires detailed explanation.

The Test Director signs and dates the SIMCart Exception report set (in ink) and obtains other approvals, if required.

1.8 Prerequisites

The following conditions shall exist at start of testing for the portion of the system being tested.

1.8.1 DYN Test Director has been notified a minimum of 4 hours prior to start a test.

1.8.2 Systems and components have been labeled or tagged in accordance with the construction package drawings.

1.8.3 Reference documents (including this ATP) have been verified for correct revision number and outstanding ECNs or DCNs.

1.8.4 All worker safety equipment required to perform test is readily available.

1.8.5 Personnel and support staff responsible for directing the test described in this ATP understand the vendor information (VI) and are qualified to perform the test.

1.9 Test Equipment Required

Supplied by FDNW CCAD unless otherwise noted:

1.9.1 Multimeter (MM), 1 required, consists of :

2-600 V ac/dc
2 wire, 0-10 megaohms
4-20 mA to 20 mA, adjustable
remote clamp-on current probe, ac/dc, 200 A

Test lead set with clips.

Instrument No. 20422 Expiration Date 4-1-00

McCune's Instruments / Power City Electric.

1.9.2 Transmitter calibrator/simulator: 2 required, Selectable 2-wire (loop powered by internal battery) and source, adjustable 4-20 mA and 0-120 VAC.

Instrument No. 72660272 Expiration Date 4-1-00

1.10 Abbreviations

DCN	Design Change Notice
ECN	Engineering Change Notice
HS	Hand Switch
HMI	Human Machine Interface
PLC	Programmable Logic Controller
MM	Multimeter
TB	Terminal Block
SIMCart	Simulator Cart Laptop PC

2. ACCEPTANCE TEST 200 WEST AREA

2.1 Clearwell Chlorine Analyzer ATP

2.1.01	HMI: Verify HMI is in communication with the 283W PLC. HMI: Is the 283W communication light blinking?
Prep	HMI: Go to the WEST CHLORINE FEED SYSTEM Faceplate.
Prep	HMI: DWG H-2-827239 SH 1 (Ref. for the next steps).
Prep	Technician: Go to the Residual Chlorine Meter (WX01) (AI_283W_202).
2.1.02	Technician: Lift the wires from the plus (TB6-58) and minus (TB6-59) terminals. HMI: Does the "XMTR FAIL" alarm for the Residual Chlorine Meter activate?
Prep	HMI: ACK "XMTR FAIL" alarm for the Residual Chlorine Meter.
2.1.03	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the Effluent Chlorine Residual Level = 0 ppm ± 1%?
2.1.04	Technician: Reset the simulator to 20 mA. HMI: Is the Effluent Chlorine Residual Level = 10 ppm ± 1%?
2.1.05	Technician: Land the wires back on the plus (TB6-58) and minus (TB6-59) terminals. HMI: Does the "XMTR FAIL" alarm for the Residual Chlorine Meter disappear?
Prep	HMI: Close the WEST CHLORINE FEED SYSTEM Faceplate.
Prep	HMI: Reminder - Verify event log.

Passing Report

Section CHLANLATP

LogDate	ID	Tester	Description
5/19/99 14:13:16	2.1.01	ALM	HMI: Is the 283W communication light blinking? [YES]
5/19/99 14:14:30	2.1.02	ALM	HMI: Does the "XMTR FAIL" alarm for the Residual Chlorine Meter activate? [YES]
5/19/99 14:15:32	2.1.03	ALM	HMI: Is the Effluent Chlorine Residual Level = 0 ppm ± 1%? [YES]
5/19/99 14:15:49	2.1.04	ALM	HMI: Is the Effluent Chlorine Residual Level = 10 ppm ± 1%? [YES]
5/19/99 14:17:03	2.1.05	ALM	HMI: Does the "XMTR FAIL" alarm for the Residual Chlorine Meter disappear? [YES]

Tony McPherson	5/19/99	Brian Chlanova	6/30/99
DynCorp Test Director	Date	FDNW Project Manager	Date
SJ Romero	6/30/99	Will Thoma	6/30/99
FDNW Test Director	Date	Recorder - FDNW	Date
[illegible]	5/19/99	[illegible]	5/19/1999
Authorized Inspector - FDH	Date	Witness	Date

5/19/99 14:59:28 14:59:28 Page 1 of 1

Exceptions Report

Section CHLORINE ANALYZER (2.1)

LogDate	ID	Tester	RAA	EAA	O	Description
			☐	☐	☐	

X NO EXCEPTIONS

Tony McPhee	5/19/99	Brian Clarance	5/29/99	SJ Romero	6/30/99
DynCorp Test Director	Date	FDNW Project Manager	Date	FDNW Test Director	Date
Will Thomas	6/30/99	[illegible]	5/19/99	[illegible]	5/19/99
Recorder - FDNW	Date	Authorized Inspector -FDH	Date	Witness	Date

5/19/99 14:59:24 14:59:24

2.2 Chlorine Feed System Injectors and Controls ATP

2.2.01	HMI: Verify HMI is in communication with the 283W PLC. HMI: Is the 283W communication light blinking?
Prep	Testing remote/local chlorine flow controls and interlocks
2.2.02	Test Director: Ensure that chlorine controllers (PCUs) and actuators have been configured for proportional control mode Test Director: Controllers appear to be set up correctly?
Prep	Operator: Go to the Chlorine Feed System 1 Flow Controller/PCU (WY13, FIC_283W_202).
Prep	HMI: Go to Chlorine Feed System 1 Faceplate.
2.2.03	HMI: Select CHLORINE FEED SYSTEM 1 - MANUAL, 0% Are the setpoint units %?
2.2.04	Operator: Set PCU for chlorine feed system 1 to AUTO Operator: Is the PCU output 0%?
2.2.05	HMI: Set the FLOW OUTPUT to 100 %. Operator: Is the CHLORINE FLOW through chlorine feed #1 30 ± 1 LBS/DAY? Does the PCU indicate actuator at 100%? 99.8
2.2.06	HMI: Set the FLOW OUTPUT to 25 %. Operator: Does the PCU indicate actuator at 25%?
2.2.07	Technician: Lift leads from PLC side of TB3A-13 and TB3B-13 and connect them together HMI: Is the CHLORINE GAS ALARM active? Operator: Does the CHLORINE FLOW through the chlorine feed systems drop to zero?

2.2.08	Technician: Land connected leads from TB3A-13 and TB3B-13 back in the MCB HMI: Does the CHLORINE GAS ALARM return to normal? Operator: Do the chlorine flows return to pre-alarm values?
2.2.09	HMI: Set the FLOW OUTPUT to 0 %. Operator: Is the CHLORINE FLOW through chlorine feed #1 0 ± 1 LBS/DAY? Does the PCU indicate actuator at 0%?
2.2.10	Operator: Set PCU for chlorine feed system 1 to MANUAL and select desired flow rate from the PCU ("electric manual" mode) Operator: Flow rate OK?
Prep	Operator: Go to the Chlorine Feed System 2 Flow Controller/PCU (WY16, FIC_283W_204).
Prep	HMI: Go to Chlorine Feed System 2 Faceplate.
2.2.11	HMI: Select CHLORINE FEED SYSTEM 2 - MANUAL, 0% Are the setpoint units %?
2.2.12	Operator: Set PCU for chlorine feed system 2 to AUTO Operator: Is the PCU output 0%?
2.2.13	HMI: Set the FLOW OUTPUT to 100 %. Operator: Is the CHLORINE FLOW through chlorine feed #2 30 ± 1 LBS/DAY? Does the PCU indicate actuator at 100%?
2.2.14	HMI: Set the FLOW OUTPUT to 25 %. Operator: Does the PCU indicate actuator at 25%?
2.2.15	Technician: Lift leads from PLC side of TB3A-13 and TB3B-13 and connect them together HMI: Is the CHLORINE GAS ALARM active? Operator: Does the CHLORINE FLOW through the chlorine feed systems drop to zero?

2.2.16	Technician: Land connected leads from TB3A-13 and TB3B-13 back in the MCB HMI: Does the CHLORINE GAS ALARM return to normal? Operator: Do the chlorine flows return to pre-alarm values?
2.2.17	HMI: Set the FLOW OUTPUT to 0 %. Operator: Is the CHLORINE FLOW through chlorine feed #2 0 ± 1 LBS/DAY? Does the PCU indicate actuator at 0%?
2.2.18	Operator: Set PCU for chlorine feed system 2 to MANUAL and select desired flow rate from the PCU ("electric manual" mode) Operator: Flow rate OK?
Prep	*Testing chlorine solenoid valves (EV-202 and EV-204)*
2.2.19	Operator: Close the CHLORINE SUPPLY VALVE Operator: Is the flow of chlorine to the actuators OFF?
Prep	Operator: Go to the Water Supply Valve to Chlorine Station #1 (Y75, EV_283W_202).
2.2.20	HMI: Select Station #1 - SHUT Operator: Is the water valve CLOSED? (check pressure and flow)
2.2.21	HMI: Select Station #1 - OPEN Operator: Is the water valve OPEN? (check pressure and flow)
Prep	*Operator: Go to the Water Supply Valve to Chlorine Station #2 (Y76, EV_283W_204).*
2.2.22	HMI: Select Station #2 - SHUT Operator: Is the water valve CLOSED? (check pressure and flow)
2.2.23	HMI: Select Station #2 - OPEN Operator: Is the water valve OPEN? (check pressure and flow)

	Operator: OPEN the CHLORINE SUPPLY VALVE Operator: Is the flow of chlorine to the actuators ON?
Prep	Testing chlorine flow transmitter input to PLC
Prep	Technician: Go to the Chlorine Feed System Flow Transmitter (WX23) (FT_283W_205).
2.2.24	Technician: Lift the wires from the plus (TB6-22) and minus (TB6-23) terminals. HMI: Does the "XMTR FAIL" alarm for the Chlorine Feed System Flow Transmitter ACTIVATE?
Prep	HMI: ACK "XMTR FAIL" alarm for the Chlorine Feed System Flow Transmitter.
2.2.25	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the Chlorine Feed System Flow = 0 LBS/DAY ± 1%?
2.2.26	Technician: Reset the simulator to 20 mA. HMI: Is the Chlorine Feed System Flow = 60 LBS/DAY ± 1%?
2.2.27	Technician: Land the wires back on the plus (TB6-22) and minus (TB6-23) terminals. HMI: Does the "XMTR FAIL" alarm for the Chlorine Feed System Flow Transmitter CLEAR?
2.2.28	Operator: Add the local chlorine flow indications for chlorine feed systems 1 and 2 HMI: Is the sum of the local flow indications about the same as the flow indication from FT_283W_205?
Prep	HMI: Verify event log.

Passing Report

Section CHLINJATP

LogDate	ID	Tester	Description
5/20/99 15:04:20	2.2.01	TLS	HMI: Is the 283W communication light blinking? [YES]
5/20/99 15:04:47	2.2.02	TLS	Test Director: Controllers appear to be set up correctly? [YES]
5/20/99 15:08:12	2.2.03	TLS	Are the setpoint units %? [YES]
5/20/99 15:08:32	2.2.04	TLS	Operator: Is the PCU output 0%? [YES]
5/20/99 15:09:25	2.2.05	TLS	Operator: Is the CHLORINE FLOW through chlorine feed #1 30 ± 1 LBS/DAY? Does the PCU indic [YES]
5/20/99 15:10:49	2.2.06	TLS	Operator: Does the PCU indicate actuator at 25%? [YES]
5/20/99 15:15:10	2.2.07	TLS	HMI: Is the CHLORINE GAS ALARM active? Operator: Does the CHLORINE FLOW through the chlori [YES]
5/20/99 15:16:52	2.2.09	TLS	Operator: Is the CHLORINE FLOW through chlorine feed #1 0 ± 1 LBS/DAY? Does the PCU indica [YES]
5/20/99 15:19:17	2.2.10	TLS	Operator: Flow rate OK? [YES]
5/20/99 15:21:47	2.2.11	TLS	Are the setpoint units %? [YES]
5/20/99 15:22:12	2.2.12	TLS	Operator: Is the PCU output 0%? [YES]
5/20/99 15:23:15	2.2.13	TLS	Operator: Is the CHLORINE FLOW through chlorine feed #2 30 ± 1 LBS/DAY? Does the PCU indic [YES]
5/20/99 15:23:40	2.2.14	TLS	Operator: Does the PCU indicate actuator at 25%? [YES]
5/20/99 15:24:52	2.2.15	TLS	HMI: Is the CHLORINE GAS ALARM active? Operator: Does the CHLORINE FLOW through the chlori [YES]
5/20/99 15:26:16	2.2.17	TLS	Operator: Is the CHLORINE FLOW through chlorine feed #2 0 ± 1 LBS/DAY? Does the PCU indica [YES]
5/20/99 15:29:23	2.2.18	TLS	Operator: Flow rate OK? [YES]
5/20/99 15:39:38	2.2.19	TLS	Operator: Is the flow of chlorine to the actuators OFF? [YES]
5/20/99 15:40:54	2.2.20	TLS	Operator: Is the water valve CLOSED? (check pressure and flow) [YES]
5/20/99 15:41:15	2.2.21	TLS	Operator: Is the water valve OPEN? (check pressure and flow) [YES]

DynCorp Test Director	5/20/99 Date	FDNW Project Manager	5/29/99 Date
FDNW Test Director	6/30/99 Date	Recorder - FDNW	6/30/99 Date
Authorized Inspector - FDH	5/20/99 Date	Witness	6/30/99 Date

5/20/99 15:55:44 15:55:44 Page 1 of 2

5/20/99 15:41:45	2.2.22	TLS	Operator: Is the water valve CLOSED? (check pressure and flow) [YES]
5/20/99 15:41:59	2.2.23	TLS	Operator: Is the water valve OPEN? (check pressure and flow) [YES]
5/20/99 15:50:50	2.2.25	TLS	HMI: Is the Chlorine Feed System Flow = 0 LBS/DAY ± 1%? [YES]
5/20/99 15:51:03	2.2.26	TLS	HMI: Is the Chlorine Feed System Flow = 60 LBS/DAY ± 1%? [YES]
5/20/99 15:53:10	2.2.27	TLS	HMI: Does the "XMTR FAIL" alarm for the Chlorine Feed System Flow Transmitter CLEAR? [YES]
5/20/99 15:53:35	2.2.28	TLS	HMI: Is the sum of the local flow indications about the same as the flow indication from F [YES]

* SEE HAND WRITTEN EXCEPTION

DynCorp Test Director	5/20/99 Date	FDNW Project Manager	5/29/99 Date
FDNW Test Director	6/30/99 Date	Recorder - FDNW	6/30/99 Date
Authorized Inspector - FDH	5/20/99 Date	Witness	6/30/99 Date

Exceptions Report

Section CHLINJATP

LogDate	ID	Tester	RAA	EAA	O	Description
5/20/99 15:16:05	2.2.08	TLS	☐	☒	☐	HMI: Does the CHLORINE GAS ALARM return to normal? Operator: Do the chlorine[No: remained at zero%]
5/20/99 15:25:53	2.2.16	TLS	☐	☒	☐	HMI: Does the CHLORINE GAS ALARM return to normal? Operator: Do the chlorin[No: flow remains at 0%]
5/20/99 15:49:58	2.2.24	TLS	☒	☐	☐	HMI: Does the "XMTR FAIL" alarm for the Chlorine Feed System Flow Transmitter ACTIVATE?[No: no alre

* NOT RECORDED → CL_2 FLOW METER DOES NOT FUNCTION. REPAIR OR OVERHAUL OR REPLACEMENT REQ'D. RERUN FLOW PORTION AFTER THAT. TLS 5/20/99 #2.2.28

23

9/22/99 #2.2.08 + 2.2.16: EXCEPTIONS ACCEPTED AS-IS. PROGRAM BEHAVES LIKE IT SHOULD + IS ACCEPTABLE TO OPERATIONS

#2.2.24: EXCEPTION CLEARED AFTER REWORK OF PLC/HMI LOGIC, RIGHT AFTER ATP.

#CL_2 METER: CL_2 METER WAS REPLACED, #2.2.28 CHECKED + PASSED.

Thomas Swift 9/22/98

Thomas Swift	5/20/99	Barry C. Hanson	5/29/99	Sy Romero	6/30/99
DynCorp Test Director	Date	FDNW Project Manager	Date	FDNW Test Director	Date
Nick Thomas	6/30/99	Ralph Doyle	5/20/99	Bob Nguyen	6/30/99
Recorder - FDNW	Date	Authorized Inspector -FDH	Date	Witness	Date

2.3 Clearwell Level Control, BW and SW Indication ATP

Prep	HMI: Verify HMI is in communication with the 283W PLC. HMI: Is the 283W communication light blinking?
Prep	HMI: Go to the APPROPRIATE HMI Faceplate.
Prep	HMI: DWG H-2-829270 SH 2 (Ref. for the next steps).
Prep	Technician: Go to the Clearwell #1 Level Transmitter (WX35) (LIT_283W_003A).
Prep	Technician: Lift the wires from terminals 3 (+, TB5-25) and 6 (-, TB5-26).
2.3.01	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the Clearwell #1 Level = 0 ft ± 1%?
2.3.02	Technician: Reset the simulator to 20 mA. HMI: Is the Clearwell #1 Level = 15 ft ± 1%?
2.3.03	Technician: Land the wires back on terminals 3 (+, TB5-25) and 6 (-, TB5-26). Technician: Are the wires reconnected?
Prep	Technician: Go to the Clearwell #2 Level Transmitter (WX36) (LIT_283W_003B).
Prep	Technician: Lift the wires from terminals 6 (+, TB5-31) and 3 (-, TB5-32).
2.3.04	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the Clearwell #2 Level = 0 ft ± 1%?

2.3.05	Technician: Reset the simulator to 20 mA. HMI: Is the Clearwell #2 Level = 15 ft ± 1%?
2.3.06	Technician: Land the wires back on terminals 6 (+, TB5-31) and 3 (-, TB5-32). Technician: Are the wires reconnected?
Prep	HMI: DWG H-2-829270 SH 4 (Ref. for the next steps).
Prep	Technician: Go to the Backwash Flow to Filters Flow Transmitter (WX08) (FIT_283W_007).
Prep	Technician: Lift the wires from the plus (TB5-73) and minus (TB5-74) terminals.
2.3.07	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the Backwash Flow to Filters Flow = 0 gpm ± 1%?
2.3.08	Technician: Reset the simulator to 20 mA. HMI: Is the Backwash Flow to Filters Flow = 5000 gpm ± 1%?
2.3.09	Technician: Land the wires back on the plus (TB5-73) and minus (TB5-74) terminals. Technician: Are the wires reconnected?
Prep	HMI: DWG H-2-829270 SH 6 (Ref. for the next steps).
Prep	Technician: Go to the Surface Wash Flow to Filters Flow Transmitter (WX17) (FIT_283W_008).
Prep	Technician: Lift the wires from the plus (TB5-79) and minus (TB5-80) terminals.

2.3.10	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the Surface Wash Flow to Filters Flow = 0 gpm ± 1%?
2.3.11	Technician: Reset the simulator to 20 mA. HMI: Is the Surface Wash Flow to Filters Flow = 200 gpm ± 1%?
2.3.12	Technician: Land the wires back on the plus (TB5-79) and minus (TB5-80) terminals. Technician: Are the wires reconnected?
Prep	HMI: Close the APPROPRIATE HMI Faceplate.
Prep	HMI: Reminder - Verify event log.

Passing Report

Section LVLCNTRLLPATP SECTION 2-3

LogDate	ID	Tester	Description
5/15/99 3:54:25 PM	2.3.01	SGR	HMI: Is the Clearwell #1 Level = 0 ft ± 1%?[YES]
5/15/99 3:55:17 PM	2.3.02	SGR	HMI: Is the Clearwell #1 Level = 15 ft ± 1%?[YES]
5/15/99 3:57:13 PM	2.3.03	SGR	Technician: Are the wires reconnected?[YES]
5/15/99 3:59:27 PM	2.3.04	SGR	HMI: Is the Clearwell #2 Level = 0 ft ± 1%?[YES]
5/15/99 3:59:37 PM	2.3.05	SGR	HMI: Is the Clearwell #2 Level = 15 ft ± 1%?[YES]
5/15/99 4:04:42 PM	2.3.06	SGR	Technician: Are the wires reconnected?[YES]
5/15/99 4:07:03 PM	2.3.07	SGR	HMI: Is the Backwash Flow to Filters Flow = 0 gpm ± 1%?[YES]
5/15/99 4:07:22 PM	2.3.08	SGR	HMI: Is the Backwash Flow to Filters Flow = 5000 gpm ± 1%?[YES]
5/15/99 4:08:34 PM	2.3.09	SGR	Technician: Are the wires reconnected?[YES]
5/15/99 4:10:11 PM	2.3.10	SGR	HMI: Is the Surface Wash Flow to Filters Flow = 0 gpm ± 1%?[YES]
5/15/99 4:10:26 PM	2.3.11	SGR	HMI: Is the Surface Wash Flow to Filters Flow = 200 gpm ± 1%?[YES]
5/15/99 4:11:47 PM	2.3.12	SGR	Technician: Are the wires reconnected?[YES]

Thomas Swart	5/15/99	Brian Hanson	5/15/99
DynCorp Test Director	Date	FDNW Project Manager	Date
Sy Romero	5/15/99	Will Thomas	6/30/99
FDNW Test Director	Date	Recorder - FDNW	Date
Robert Taylor	5-15-99	James Sidwell	5/15/99
Authorized Inspector - FDH	Date	Witness	Date

Exceptions Report

Section 2.3

LogDate	ID	Tester	RAA	EAA	O	Description
			☐	☐	☐	

* NO EXCEPTIONS

DynCorp Test Director	5/15/99 Date	FDNW Project Manager	5/15/99 Date	FDNW Test Director	5/15/99 Date
Recorder - FDNW	6/30/99 Date	Authorized Inspector -FDH	5-15-99 Date	Witness	5/15/99 Date

5/15/99 4:20:52 PM 4:20:52 PM

2.4 Raw Water Inlet Controls and Instrumentation ATP

2.4.01	HMI: Verify HMI is in communication with the 283W PLC. HMI: Is the 283W communication light blinking?
Prep	HMI: Go to the WEST WATER TREATMENT PLANT Faceplate.
Prep	HMI: Go to the RAW WATER INFLUENT Faceplate.
Prep	HMI: (Ref. for the next steps) DWG H-2-829270 SH 1.
Prep	*Technician: Go to the Raw Water Inlet Flow Transmitter (WX18) (FIT_283W_001).*
Prep	Technician: Lift the wires from the plus (TB5-4) and minus (TB5-5) terminals.
2.4.02	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the Raw Water Influent Flow = 0 gpm ± 1%?
2.4.03	Technician: Reset simulator to 20 mA. HMI: Is the Raw Water Influent Flow = 3200 gpm ± 1%?
2.4.04	Technician: Land the wires back on the plus (TB5-4) and minus (TB5-5) terminals. Technician: Are the wires reconnected?
Prep	HMI: DWG H-2-829270 SH 2 (Ref. for the next steps)
Prep	Operator: Go to the Raw Water Inlet Valve (MOV_283W_005).

2.4.05	Lead Engineer: Have the valve settings, switches, etc been set up in accordance with manufacturer's instructions? HMI: Did you receive verification from the Lead Engineer?
Prep	Operator: Isolate the Raw Water Inlet Valve to satisfaction of plant engineer.
Prep	Operator: Position valve operating switch to AUTO.
2.4.06	HMI: Increase manual setting to 50%. HMI: Does the valve position indicator show about half open? Operator: Does the valve position indicator show about half open?
2.4.07	HMI: Increase manual setting to 100%. HMI: Is the valve OPEN Indication ON? Operator: Is the valve OPEN Indication ON?
2.4.08	HMI: Decrease manual setting to 0%. HMI: Is the valve CLOSED Indication ON? Operator: Is the valve CLOSED Indication ON?
Prep	Operator: Align the Raw Water Inlet Valve and surrounding equipment as directed by plant engineer.
Prep	Technician: Go to the Filter Influent Flume Level Transmitter (WX34) (LIT_283W_005).
Prep	Technician: Lift the wires from terminals 6 (+, TB5-19) and 3 (-, TB5-20).
2.4.09	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the Filter Influent Flume Level = -10 in ± 1%?
2.4.10	Technician: Reset the simulator to 12 mA. HMI: Is the Filter Influent Flume Level = 0 in ± 1%?

2.4.11	Technician: Reset the simulator to 20 mA. HMI: Is the Filter Influent Flume Level = 10 in ± 1%?
2.4.12	Technician: Land the wires back on terminals 6 (+, TB5-19) and 3 (-, TB5-20). Technician: Are the wires reconnected?
Prep	HMI: DWG H-2-829270 SH 5 (Ref. for the next steps)
Prep	Technician: Go to the 283W Raw Water (Influent) Turbidity Transmitter (WX51) (AIT_283W_002).
2.4.13	Technician: Lift the wires from the plus (TB4-FU-3) and minus (TB4-5) terminals. HMI: Does the "XMTR FAIL" alarm for the 283W Raw Water (Influent) Turbidity Transmitter activate?
Prep	HMI: ACK "XMTR FAIL" alarm for the 283W Raw Water (Influent) Turbidity Transmitter.
2.4.14	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the Turbidity = 0 ntu ± 1%?
2.4.15	Technician: Reset the simulator to 20 mA. HMI: Is the Turbidity = 10 ntu ± 1%?
2.4.16	Technician: Land the wires back on the plus (TB4-FU-3) and minus (TB4-5) terminals. HMI: Does the "XMTR FAIL" alarm for the 283W Raw Water (Influent) Turbidity Transmitter disappear?
Prep	HMI: Close the RAW WATER INLET Faceplate.
Prep	HMI: Reminder - Verify event log.

Passing Report

Section FILTERMISCATP

LogDate	ID	Tester	Description
5/19/99 14:19:25	2.4.01	ALM	HMI: Is the 283W communication light blinking? [YES]
5/19/99 14:35:48	2.4.02	ALM	HMI: Is the Raw Water Influent Flow = 0 gpm ± 1%? [YES]
5/19/99 14:36:01	2.4.03	ALM	HMI: Is the Raw Water Influent Flow = 3200 gpm ± 1%? [YES]
5/19/99 14:39:02	2.4.04	ALM	Technician: Are the wires reconnected? [YES]
5/19/99 14:44:24	2.4.09	ALM	HMI: Is the Filter Influent Flume Level = -10 in ± 1%? [YES]
5/19/99 14:45:00	2.4.10	ALM	HMI: Is the Filter Influent Flume Level = 0 in ± 1%? [YES]
5/19/99 14:45:13	2.4.11	ALM	HMI: Is the Filter Influent Flume Level = 10 in ± 1%? [YES]
5/19/99 14:46:33	2.4.12	ALM	Technician: Are the wires reconnected? [YES]
5/19/99 14:51:40	2.4.13	ALM	HMI: Does the "XMTR FAIL" alarm for the 283W Raw Water (Influent) Turbidity Transmitter ac [YES]
5/19/99 14:52:02	2.4.14	ALM	HMI: Is the Turbidity = 0 ntu ± 1%? [YES]
5/19/99 14:52:14	2.4.15	ALM	HMI: Is the Turbidity = 10 ntu ± 1%? [YES]
5/19/99 14:54:19	2.4.16	ALM	HMI: Does the "XMTR FAIL" alarm for the 283W Raw Water (Influent) Turbidity Transmitter di [YES]

Tony McPhee	5/19/99	Brian C Hanson	5/29/99
DynCorp Test Director	Date	FDNW Project Manager	Date
S J Romer	6/30/99	Neil Thoma	6/30/99
FDNW Test Director	Date	Recorder - FDNW	Date
[illegible]	5/19/99	[illegible]	5/19/99
Authorized Inspector - FDH	Date	Witness	Date

Exceptions Report

Section FILTERMISCATP

LogDate	ID	Tester	RAA	EAA	O	Description
5/19/99 14:39:46	2.4.05	ALM	☒	☐	☐	HMI: Did you receive verification from the Lead Engineer?[No: incomplete]
5/19/99 14:40:26	2.4.06	ALM	☒	☐	☐	HMI: Does the valve position indicator show about half open? Operator: Does th[No: non-operational]
5/19/99 14:40:30	2.4.07	ALM	☒	☐	☐	HMI: Is the valve OPEN Indication ON? Operator: Is the valve OPEN Indication ON?[No: non-operationa
5/19/99 14:40:37	2.4.08	ALM	☒	☐	☐	HMI: Is the valve CLOSED Indication ON? Operator: Is the valve CLOSED Indication ON?[No: non-operat

2.4.05
.06
.07
.08

VALVE WAS NOT INSTALLED OR IN-SERVICE DURING ATP. AFTER MAINTENANCE FINISHED INSTALLATION, ABOVE TESTS WERE COMPLETED SATISFACTORY.

Thomas Sweet
1/4/00

Tony McK	5/19/99	[illegible]	5/29/99	Sy Romer	6/30/99
DynCorp Test Director	Date	FDNW Project Manager	Date	FDNW Test Director	Date
Will Thomas	6/30/99	T L Clarke	8-10-99	[illegible]	6/30/99
Recorder - FDNW	Date	Authorized Inspector -FDH	Date	Witness	Date

2.5 Filter 1 ATP

2.5.01	HMI: Verify HMI is in communication with the 283W PLC. HMI: Is the 283W communication light blinking?
Prep	HMI: Go to the WEST FILTER 1 Faceplate.
Prep	HMI: (Ref. for the next steps) DWG H-2-829270 SH 8.
Prep	Technician: Go to the Filter No. 1 Differential Pressure Indicator in Cabinet LCP-F1 (X20) (DPAH_283W_011H).
2.5.02	Technician: Lift the wire from terminal (TB-B)-4. HMI: Is the HEAD LOSS now "NORMAL"?
2.5.03	Technician: Land the wire back on terminal (TB-B)-4. HMI: Did the HEAD LOSS return to "HIGH"?
Prep	Technician: Go to the Filter No. 1 Turbidity Transmitter (WX02) (AIT_283W_012).
2.5.04	Technician: Lift the wires from terminals 2 (+, ~~TB2-4~~ TB-1 TW) and 3 (-, ~~TB2-5~~ TB-1 TLS). HMI: Does the "XMTR FAIL" alarm for the Filter No. 1 Turbidity Transmitter activate?
Prep	HMI: ACK "XMTR FAIL" alarm for the Filter No. 1 Turbidity Transmitter.
2.5.05	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the Filter No. 1 Turbidity = 0 ntu ± 1%?
2.5.06	Technician: Reset the simulator to 20 mA. HMI: Is the Filter No. 1 Turbidity = 10 ntu ± 1%?

2.5.07	Technician: Land the wires back on terminals 2 (+, ~~TB2-4~~ TB-1 TLS) and 3 (-, ~~TB2-5~~ TB-1 TLS) (at LCP-F1). HMI: Does the "XMTR FAIL" alarm for the Filter No. 1 Turbidity Transmitter disappear?
Prep	HMI: DWG H-2-829270 SH 9 (Ref. for the next steps).
Prep	Technician: Go to the Filter No. 1 Effluent Flow Transmitter (WX19) (FIT_283W_013) (WY~~40~~ 45 TLS) (FI_283W_013H).
Prep	Technician: Lift the wires from the plus (~~TB5-49~~ @ MCB) and minus (~~TB5-50~~ @ MCB TLS) terminals.
2.5.08	Technician: Reconnect the wires to simulator and set to 4 mA. HMI: Is the Filter No. 1 Effluent Flow = 0 gpm ± 8 gpm? Effluent Flow = 0 gpm ± 8 gpm? Operator: Is the Filter No. 1 TLS
2.5.09	Technician: Reset the simulator to 20 mA. HMI: Is the Filter No. 1 Effluent Flow = 800 gpm ± 8 gpm? 1 Effluent Flow = 800 gpm ± 8 gpm? Operator: Is the Filter No. TLS
2.5.10	Technician: Land the wires back on the plus (TB5-49) and minus (TB5-50) terminals. Technician: Are the wires reconnected?
Prep	Operator: Go to the Filter No. 1 Effluent Valve (MOV_283W_013) (WY77) (FIC_283W_013).
2.5.11	Operator: Isolate the Filter No. 1 Effluent Valve to the satisfaction of plant engineer. Operator: Is the Valve isolated?
Prep	Operator: Position valve operating switch to ~~AUTO~~. REMOTE TLS
2.5.12	Operator: Position LCP switch to MANUAL and close valve from LCP HMI: Is it not possible to operate the Filter No. 1 Effluent Valve from the HMI?

2.5.13	Operator: Position LCP switch to AUTO and HMI in MANUAL, 0% HMI: Is the valve CLOSED? Operator: Is the LCP valve CLOSED light ON?
2.5.14	HMI: Increase manual setting to 50%. Operator: Does the valve position indicator show about half open?
2.5.15	HMI: Open on-line session to PLC and go to Filter No. 1 logic. HMI: Is the Filter run time counter advancing?
2.5.16	HMI: Increase manual setting to 100%. Operator: Is the LCP valve OPEN light ON?
2.5.17	HMI: Decrease manual setting to 0%. Operator: Is the LCP valve CLOSED light ON?
2.5.18	Operator: Position LCP switch to MANUAL and open to 100% at LCP. Operator: Does the valve indicate OPEN?
2.5.19	Operator: Close valve at LCP. Operator: Does the valve indicate CLOSED?
2.5.20	Operator: Align the Filter No. 1 Effluent Valve and surrounding equipment as directed by plant engineer. Operator: Has the valve and surrounding equipment been returned to acceptable configuration?
Prep	HMI: Close the WEST FILTER 1 Faceplate.
Prep	HMI: Reminder - Verify HMI activities event log.

Passing Report

Section FILTER1ATP

LogDate	ID	Tester	Description
5/15/99 4:34:39 PM	2.5.01	SGR	HMI: Is the 283W communication light blinking?[YES]
5/15/99 4:34:58 PM	2.5.02	SGR	HMI: Is the HEAD LOSS now "NORMAL"?[YES]
5/15/99 4:55:46 PM	2.5.05	SGR	HMI: Is the Filter No. 1 Turbidity = 0 ntu ± 1%?[YES]
5/15/99 5:24:52 PM	2.5.10	SGR	Technician: Are the wires reconnected?[YES]
5/15/99 5:25:06 PM	2.5.11	SGR	Operator: Is the Valve isolated?[YES]
5/15/99 5:26:48 PM	2.5.12	SGR	HMI: Is it not possible to operate the Filter No. 1 Effluent Valve from the HMI?[YES]
5/15/99 5:30:29 PM	2.5.14	SGR	Operator: Does the valve position indicator show about half open?[YES]
5/15/99 5:32:14 PM	2.5.15	SGR	HMI: Is the Filter run time counter advancing?[YES]
5/15/99 5:36:31 PM	2.5.17	SGR	Operator: Is the LCP valve CLOSED light ON?[YES]
5/15/99 5:39:51 PM	2.5.19	SGR	Operator: Does the valve indicate CLOSED?[YES]
5/15/99 5:40:48 PM	2.5.20	SGR	Operator: Has the valve and surrounding equipment been returned to acceptable configuration?[YES]

DynCorp Test Director	5/15/99 Date	FDNW Project Manager	5/15/99. Date
FDNW Test Director	5/15/99 Date	Recorder - FDNW	6/30/99 Date
Authorized Inspector - FDH	5/15/99 Date	Witness	5/15/99 Date

5/15/99 5:44:49 PM 5:44:49 PM

Exceptions Report

Section FILTER1ATP

LogDate	ID	Tester	RAA	EAA	O	Description
5/15/99 4:36:50 PM	2.5.03	SGR	☐	☐	☐	HMI: Did the HEAD LOSS return to "HIGH"?[Negative: was not high initially - check NO/NC]
5/15/99 4:56:45 PM	2.5.06	SGR	☒ TL	☒	☐	HMI: Is the Filter No. 1 Turbidity = 10 ntu ± 1%?[Negative: no change from 4 mA reading]
5/15/99 5:27:54 PM	2.5.13	SGR	☐	☒	☒ TLS	HMI: Is the valve CLOSED? Operator: Is the LCP valve CLOSED light ON?[Negative: no valve closed at LCP]
5/15/99 5:34:06 PM	2.5.16	SGR	☐	☒	☐	Operator: Is the LCP valve OPEN light ON?[Negative: no - valve opened to 92%]
5/15/99 5:38:21 PM	2.5.18	SGR	☐	☒	☐	Operator: Does the valve indicate OPEN?[Negative: no indication at valve]

FAILED TEST, DID NOT SHOW ON REPORT. TLS 5/15

		RAA
2.05.07	NO XMTR FAIL ALARM	☒
2.05.08	LCP INDICATION SWINGING, HMI STEADY	☒
2.05.09	" " " , " "	☒

2.5.06 ; 2.5.07
2.5.13 ; 2.5.08
2.5.16 ; 2.5.09
2.5.18

ACCEPTED 6/28/99
VALVE INDICATIONS TO BE DPS RESPONSIBILITY
TLS 6/28/99

Thomas Smith	5/15/99	Brian Hanson	5/15/99	Sy Romero	5/15/99
DynCorp Test Director	Date	FDNW Project Manager	Date	FDNW Test Director	Date
Will Thom	6/30/99	Robert Taylor	5-15-99	Chris Gill	5/15/99
Recorder - FDNW	Date	Authorized Inspector -FDH	Date	Witness	Date

2.6 Filter 2 ATP

2.6.01	HMI: Verify HMI is in communication with the 283W PLC. HMI: Is the 283W communication light blinking?
Prep	HMI: Go to the WEST FILTER 2 Faceplate
Prep	HMI: (Ref. for the next steps) DWG H-2-829270 SH 10.
Prep	Technician: Go to the Filter No. 2 Differential Pressure Indicator in Cabinet LCP-F2. (X21) (DPAH_283W_021H).
2.6.02	Technician: Lift the wire from terminal TB2-40 (TB3A-59). HMI: Is the HEAD LOSS now "NORMAL"?
2.6.03	Technician: Land the wire back on terminal TB2-40 (TB3A-59). HMI: Did the HEAD LOSS return to "HIGH"?
Prep	Technician: Go to the Filter No. 2 Turbidity Transmitter (WX03) (AIT_283W_022).
2.6.04	Technician: Lift the wires from terminals TB1-2 (+, TB2-4) and TB1-3 (-, TB2-5). HMI: Does the "XMTR FAIL" alarm for the Filter No. 2 Turbidity Transmitter activate?
Prep	HMI: ACK "XMTR FAIL" alarm for the Filter No. 2 Turbidity Transmitter.
2.6.05	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the Filter No. 2 Turbidity = 0 ntu ± 1%?
2.6.06	Technician: Reset the simulator to 20 mA. HMI: Is the Filter No. 2 Turbidity = ~~10~~ .1 ntu ± 1%? TLS

2.6.07	Technician: Land the wires back on terminals TB1-2 (+, TB2-4) and TB1-3 (-, TB2-5 at cabinet LCP-F2). HMI: Does the "XMTR FAIL" alarm for the Filter No. 2 Turbidity Transmitter disappear?
Prep	HMI: DWG H-2-829270 SH 11 (Ref. for the next steps).
Prep	Technician: Go to the Filter No. 2 Effluent Flow Transmitter (WX20) (FIT_283W_023) (WY46) (FI_283W_023H).
Prep	Technician: Lift the wires from the plus (~~TB5-55~~ @MCB) and minus (~~TB5-56~~ @MCB) terminals.
2.6.08	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the Filter No. 2 Effluent Flow = 0 gpm ± 8 gpm? TLS Effluent Flow = 0 gpm ± 8 gpm? Operator: Is the Filter No. 2
2.6.09	Technician: Reset the simulator to 20 mA. HMI: Is the Filter No. 2 Effluent Flow = 800 gpm ± 8 gpm? TLS 2 Effluent Flow = 800 gpm ± 8 gpm? Operator: Is the Filter No.
2.6.10	Technician: Land the wires back on the plus (TB5-55) and minus (TB5-56) terminals. Technician: Are the wires reconnected?
Prep	Operator: Go to the Filter No. 2 Effluent Valve (MOV_283W_023) (WY30) (FIC_283W_023).
2.6.11	Operator: Isolate the Filter No. 2 Effluent Valve to the satisfaction of plant engineer. Operator: Is the Valve isolated?
Prep	Operator: Position valve operating switch to AUTO.
2.6.12	Operator: Position LCP switch to MANUAL and close valve from LCP HMI: Is it not possible to operate the Filter No. ~~1~~ 2 TLS Effluent Valve from the HMI?

2.6.13	Operator: Position LCP switch to AUTO and HMI in MANUAL, 0% HMI: Is the valve CLOSED? Operator: Is the LCP valve CLOSED light ON?
2.6.14	HMI: Increase manual setting to 50%. Operator: Does the valve position indicator show about half open?
2.6.15	HMI: Open on-line session to PLC and go to Filter No. ~~1~~ 2 logic. HMI: Is the Filter run time counter advancing?
2.6.16	HMI: Increase manual setting to 100%. Operator: Is the LCP valve OPEN light ON?
2.6.17	HMI: Decrease manual setting to 0%. Operator: Is the LCP valve CLOSED light ON?
2.6.18	Operator: Position LCP switch to MANUAL and open to 100% at LCP. Operator: Does the valve indicate OPEN?
2.6.19	Operator: Close valve at LCP. Operator: Does the valve indicate CLOSED?
2.6.20	Operator: Align the Filter No. 2 Effluent Valve and surrounding equipment as directed by plant engineer. Operator: Has the valve and surrounding equipment been returned to acceptable configuration?
Prep	HMI: Close the WEST FILTER 2 Faceplate.
Prep	HMI: Reminder - Verify HMI activities event log.

Passing Report

Section FILTER2ATP

LogDate	ID	Tester	Description
5/16/99 14:01:43	2.6.01	SGR	HMI: Is the 283W communication light blinking? [YES]
5/16/99 14:03:49	2.6.02	SGR	HMI: Is the HEAD LOSS now "NORMAL"? [YES]
5/16/99 14:06:37	2.6.04	SGR	HMI: Does the "XMTR FAIL" alarm for the Filter No. 2 Turbidity Transmitter activate? [YES]
5/16/99 14:07:20	2.6.05	SGR	HMI: Is the Filter No. 2 Turbidity = 0 ntu ± 1%? [YES]
5/16/99 14:08:32	2.6.07	SGR	HMI: Does the "XMTR FAIL" alarm for the Filter No. 2 Turbidity Transmitter disappear? [YES]
5/16/99 14:13:33	2.6.08	SGR	HMI: Is the Filter No. 2 Effluent Flow = 0 gpm ± 8 gpm? Operator: Is the Filter No. 2 Effl [YES]
5/16/99 14:14:26	2.6.09	SGR	HMI: Is the Filter No. 2 Effluent Flow = 800 gpm ± 8 gpm? Operator: Is the Filter No. 2 Ef [YES]
5/16/99 14:15:59	2.6.10	SGR	Technician: Are the wires reconnected? [YES]
5/16/99 14:17:43	2.6.11	SGR	Operator: Is the Valve isolated? [YES]
5/16/99 14:22:50	2.6.12	SGR	HMI: Is it not possible to operate the Filter No. 1 Effluent Valve from the HMI? [YES]
5/16/99 14:29:52	2.6.14	SGR	Operator: Does the valve position indicator show about half open? [YES]
5/16/99 14:32:37	2.6.15	SGR	HMI: Is the Filter run time counter advancing? [YES]
5/16/99 14:35:51	2.6.17	SGR	Operator: Is the LCP valve CLOSED light ON? [YES]
5/16/99 14:37:28	2.6.18	SGR	Operator: Does the valve indicate OPEN? [YES]
5/16/99 14:38:52	2.6.19	SGR	Operator: Does the valve indicate CLOSED? [YES]
5/16/99 14:40:00	2.6.20	SGR	Operator: Has the valve and surrounding equipment been returned to acceptable configuratio [YES]

Thomas Smith	5/16/99	Brian C Harrow	5/29/99
DynCorp Test Director	Date	FDNW Project Manager	Date
SJ Romero	5/16/99	Will Thomas	5-16-99
FDNW Test Director	Date	Recorder - FDNW	Date
Robert Taylor	5-16-99	[illegible]	6/30/99
Authorized Inspector - FDH	Date	Witness	Date

5/16/99 16:43:50 16:43:50 Page 1 of 1

Exceptions Report

Section FILTER2ATP

LogDate	ID	Tester	RAA	EAA	O	Description
5/16/99 14:04:50	2.6.03	SGR	☐	☐	☐	HMI: Did the HEAD LOSS return to "HIGH"?[No: head loss started in NORMAL (N.O.)]
5/16/99 14:07:49	2.6.06	SGR TZS	☒	☒	☐	HMI: Is the Filter No. 2 Turbidity = 10 ntu ± 1%?[No: =0.10 (changed span)]
5/16/99 14:24:57	2.6.13	SGR TZS	☒	☒	☐	HMI: Is the valve CLOSED? Operator: Is the LCP valve CLOSED light ON?[No: light did not show - HMI
5/16/99 14:34:38	2.6.16	SGR TZS	☒	☒	☐	Operator: Is the LCP valve OPEN light ON?[No: no light - open to 92%]

TZS 6/28/99 2.6.06 ACCEPTABLE AS-IS
2.6.13 } OPS RESPONSIBILITY
2.6.16 }

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Thomas Smith	5/16/99	Brian C. Clawson	5/29/99	Sg Romer	5/16/99
DynCorp Test Director	Date	FDNW Project Manager	Date	FDNW Test Director	Date
Willi Thomas	5-16-99	Robert Taylor	5-16-99	[illegible]	6/30/99
Recorder - FDNW	Date	Authorized Inspector -FDH	Date	Witness	Date

5/16/99 16:43:47 16:43:47

2.7 Filter 3 ATP

2.7.01	HMI: Verify HMI is in communication with the 283W PLC. HMI: Is the 283W communication light blinking?
Prep	HMI: Go to the WEST FILTER 3 Faceplate.
Prep	HMI: (Ref. for the next steps) DWG H-2-829270 SH 12.
Prep	Technician: Go to the Filter No. 3 Differential Pressure Indicator in Cabinet LCP-F3 (X22) (DPAH_283W_031H).
2.7.02	Technician: Lift the wire from terminal TB2-40 (TB3A-60). HMI: Is the HEAD LOSS now "NORMAL".
2.7.03	Technician: Land the wire back on terminal TB2-40 (TB3A-60). HMI: Did the HEAD LOSS return to "HIGH"?
Prep	Technician: Go to the Filter No. 3 Turbidity Transmitter (WX04) (AIT_283W_032).
2.7.04	Technician: Lift the wires from terminals TB1-2 (TB2-4) and TB1-3 (TB2-5). HMI: Does the "XMTR FAIL" alarm for the Filter No. 3 Turbidity Transmitter activate?
Prep	HMI: ACK "XMTR FAIL" alarm for the Filter No. 3 Turbidity Transmitter.
2.7.05	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the Filter No. 3 Turbidity = 0 ntu ± 1%?
2.7.06	Technician: Reset the simulator to 20 mA. HMI: Is the Filter No. 3 Turbidity = ~~10~~ .1 ntu ± 1%? TVS

2.7.07	Technician: Land the wires back on terminals TB1-2 (+, TB2-4) and TB1-3 (-, TB2-5 (in cabinet LCP-F3)). HMI: Does the "XMTR FAIL" alarm for the Filter No. 3 Turbidity Transmitter disappear?
Prep	HMI: DWG H-2-829270 SH 13 (Ref. for the next steps).
Prep	Technician: Go to the Filter No. 3 Effluent Flow Transmitter (WX21) (FIT_283W_033) (WY47) (FI_283W_033H).
Prep	Technician: Lift the wires from the plus (~~TB5-61~~ @MCD RS) and minus (~~TB5-62~~ @MCD) terminals.
2.7.08	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the Filter No. 3 Effluent Flow = 0 gpm ± 8 gpm? RS Effluent Flow = 0 gpm ± 8 gpm? Operator: Is the Filter No. 3
2.7.09	Technician: Reset the simulator to 20 mA. HMI: Is the Filter No. 3 Effluent Flow = 800 gpm ± 8 gpm? RS 3 Effluent Flow = 800 gpm ± 8 gpm? Operator: Is the Filter No.
2.7.10	Technician: Land the wires back on the plus (TB5-61) and minus (TB5-62) terminals. Technician: Are the wires reconnected?
Prep	Operator: Go to the Filter No. 3 Effluent Valve (MOV_283W_033) (WY61) (FIC_283W_03).
2.7.11	Operator: Isolate the Filter No. 3 Effluent Valve to the satisfaction of plant engineer. Operator: Is the Valve isolated?
Prep	Operator: Position valve operating switch to ~~AUTO~~ REMOTE RS
2.7.12	Operator: Position LCP switch to MANUAL and close valve from LCP HMI: Is it not possible to operate the Filter No. ~~1~~ 3 RS Effluent Valve from the HMI?

2.7.13	Operator: Position LCP switch to AUTO and HMI in MANUAL, 0% HMI: Is the valve CLOSED? Operator: Is the LCP valve CLOSED light ON?
2.7.14	HMI: Increase manual setting to 50%. Operator: Does the valve position indicator show about half open?
2.7.15	HMI: Open on-line session to PLC and go to Filter No. ~~1~~ 3 logic. RLS HMI: Is the Filter run time counter advancing?
2.7.16	HMI: Increase manual setting to 100%. Operator: Is the LCP valve OPEN light ON?
2.7.17	HMI: Decrease manual setting to 0%. Operator: Is the LCP valve CLOSED light ON?
2.7.18	Operator: Position LCP switch to MANUAL and open to 100% at LCP. Operator: Does the valve indicate OPEN?
2.7.19	Operator: Close valve at LCP. Operator: Does the valve indicate CLOSED?
2.7.20	Operator: Align the Filter No. 3 Effluent Valve and surrounding equipment as directed by plant engineer. Operator: Has the valve and surrounding equipment been returned to acceptable configuration?
Prep	HMI: Close the WEST FILTER 3 Faceplate.
Prep	HMI: Reminder - Verify HMI activities event log.

Passing Report

Section FILTER3ATP

LogDate	ID	Tester	Description
5/16/99 14:45:25	2.7.01	SGR	HMI: Is the 283W communication light blinking? [YES]
5/16/99 14:46:06	2.7.02	SGR	HMI: Is the HEAD LOSS now "NORMAL". [YES]
5/16/99 14:48:31	2.7.04	SGR	HMI: Does the "XMTR FAIL" alarm for the Filter No. 3 Turbidity Transmitter activate? [YES]
5/16/99 14:49:06	2.7.05	SGR	HMI: Is the Filter No. 3 Turbidity = 0 ntu ± 1%? [YES]
5/16/99 14:52:45	2.7.07	SGR	HMI: Does the "XMTR FAIL" alarm for the Filter No. 3 Turbidity Transmitter disappear? [YES]
5/16/99 14:54:55	2.7.08	SGR	HMI: Is the Filter No. 3 Effluent Flow = 0 gpm ± 8 gpm? Operator: Is the Filter No. 3 Effl [YES]
5/16/99 14:55:31	2.7.09	SGR	HMI: Is the Filter No. 3 Effluent Flow = 800 gpm ± 8 gpm? Operator: Is the Filter No. 3 Ef [YES]
5/16/99 14:56:49	2.7.10	SGR	Technician: Are the wires reconnected? [YES]
5/16/99 14:56:59	2.7.11	SGR	Operator: Is the Valve isolated? [YES]
5/16/99 14:57:56	2.7.12	SGR	HMI: Is it not possible to operate the Filter No. 1 Effluent Valve from the HMI? [YES]
5/16/99 14:58:31	2.7.13	SGR	HMI: Is the valve CLOSED? Operator: Is the LCP valve CLOSED light ON? [YES]
5/16/99 14:59:31	2.7.14	SGR	Operator: Does the valve position indicator show about half open? [YES]
5/16/99 14:59:38	2.7.15	SGR	HMI: Is the Filter run time counter advancing? [YES]
5/16/99 15:02:18	2.7.17	SGR	Operator: Is the LCP valve CLOSED light ON? [YES]
5/16/99 15:04:54	2.7.19	SGR	Operator: Does the valve indicate CLOSED? [YES]
5/16/99 15:05:18	2.7.20	SGR	Operator: Has the valve and surrounding equipment been returned to acceptable configuratio [YES]

Thomas Smart	5/16/99	Brian C. Harris	5/29/99.
DynCorp Test Director	Date	FDNW Project Manager	Date
SG Romer	5/16/99	Will Thomas	5-16-99
FDNW Test Director	Date	Recorder - FDNW	Date
Robert Taylor	5-16-99	[illegible]	6/3/99
Authorized Inspector - FDH	Date	Witness	Date

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Exceptions Report

Section FILTER3ATP

LogDate	ID	Tester	RAA	EAA	O	Description
5/16/99 14:47:03	2.7.03	SGR	☐	☐	☐	HMI: Did the HEAD LOSS return to "HIGH"?[No: started in normal (N.O.?)]
5/16/99 14:50:40	2.7.06	SGR	☐	☒	☐	HMI: Is the Filter No. 3 Turbidity = 10 ntu ± 1%?[No: read 0.10 (span changed)]
5/16/99 15:01:09	2.7.16	SGR	☐	☒	☐	Operator: Is the LCP valve OPEN light ON?[No: closed light off - open not func]
5/16/99 15:04:02	2.7.18	SGR	☐	☒	☐	Operator: Does the valve indicate OPEN?[No: closed out, open not func]

TLS 6/28/99 2.7.06 2.7.16 2.7.18 } OPS ACCEPT RESPONSIBILITY

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DynCorp Test Director	5/16/99 Date	FDNW Project Manager	5/16/99 Date	FDNW Test Director	5/29/99 Date
Recorder - FDNW	5-16-99 Date	Authorized Inspector -FDH	5-16-99 Date	Witness	6/28/99 Date

5/16/99 16:43:18 16:43:18

2.8 Filter 4 ATP

2.8.01	HMI: Verify HMI is in communication with the 283W PLC. HMI: Is the 283W communication light blinking?
Prep	HMI: Go to the WEST FILTER 4 Faceplate.
Prep	HMI: (Ref. for the next steps) DWG H-2-829270 SH 14.
Prep	Technician: Go to the Filter No. 4 Differential Pressure Indicator in Cabinet LCP-F4 (X23) (DPAH_283W_041H).
2.8.02	Technician: Lift the wire from terminal TB2-40 (TB3A-61). HMI: Is the HEAD LOSS now "NORMAL"?
2.8.03	Technician: Land the wire back on terminal TB2-40 (TB3A-61). HMI: Did the HEAD LOSS return to "HIGH"?
Prep	Technician: Go to the Filter No. 4 Turbidity Transmitter (WX05) (AIT_283W_042).
2.8.04	Technician: Lift the wires from terminals TB1-2 (+, TB2-4) and TB1-3 (-, TB2-5). HMI: Does the "XMTR FAIL" alarm for the Filter No. 4 Turbidity Transmitter activate?
Prep	HMI: ACK "XMTR FAIL" alarm for the Filter No. 4 Turbidity Transmitter.
2.8.05	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the Filter No. 4 Turbidity = 0 ntu ± 1%?
2.8.06	Technician: Reset the simulator to 20 mA. HMI: Is the Filter No. 4 Turbidity = ~~10~~ .1 ntu ± 1%? TMS

2.8.07	Technician: Land the wires back on terminals TB1-2 (+, TB2-4) and TB1-3 (-, TB2-5 in cabinet LCP-F4). HMI: Does the "XMTR FAIL" alarm for the Filter No. 4 Turbidity Transmitter disappear?
Prep	HMI: DWG H-2-829270 SH 15 (Ref. for the next steps).
Prep	Technician: Go to the Filter No. 4 Effluent Flow Transmitter (WX22) (FIT_283W_043) (WY48) (FI_283W_043H).
Prep	Technician: Lift the wires from the plus (TB5-67) and minus (TB5-68) terminals and reconnect to the simulator.
2.8.08	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the Filter No. 4 Effluent Flow = 0 gpm ± 8 gpm? RS Effluent Flow = 0 gpm ± 8 gpm? Operator: Is the Filter No. 4
2.8.09	Technician: Reset the simulator to 20 mA. HMI: Is the Filter No. 4 Effluent Flow = 800 gpm ± 8 gpm? 4 Effluent Flow = 800 gpm ± 8 gpm? Operator: Is the Filter No. RS
2.8.10	Technician: Land the wires back on the plus (TB5-67) and minus (TB5-68) terminals. Technician: Are the wires reconnected?
Prep	Operator: Go to the Filter No. 4 Effluent Valve (MOV_283W_043) (WY62) (FIC_283W_043).
2.8.11	Operator: Isolate the Filter No. ~~3~~ 4 Effluent Valve to the satisfaction of plant engineer. Operator: Is the Valve isolated? RS
Prep	Operator: Position valve operating switch to ~~AUTO~~. REMOTE
2.8.12	Operator: Position LCP switch to MANUAL and close valve from LCP HMI: Is it not possible to operate the Filter No. ~~1~~ 4 Effluent Valve from the HMI? RS

2.8.13	Operator: Position LCP switch to AUTO and HMI in MANUAL, 0% HMI: Is the valve CLOSED? Operator: Is the LCP valve CLOSED light ON?
2.8.14	HMI: Increase manual setting to 50%. Operator: Does the valve position indicator show about half open?
2.8.15	HMI: Open on-line session to PLC and go to Filter No. ~~1~~ 4 logic. HMI: Is the Filter run time counter advancing?
2.8.16	HMI: Increase manual setting to 100%. Operator: Is the LCP valve OPEN light ON?
2.8.17	HMI: Decrease manual setting to 0%. Operator: Is the LCP valve CLOSED light ON?
2.8.18	Operator: Position LCP switch to MANUAL and open to 100% at LCP. Operator: Does the valve indicate OPEN?
2.8.19	Operator: Close valve at LCP. Operator: Does the valve indicate CLOSED?
2.8.20	Operator: Align the Filter No. 4 Effluent Valve and surrounding equipment as directed by plant engineer. Operator: Has the valve and surrounding equipment been returned to acceptable configuration?
Prep	HMI: Close the WEST FILTER 4 Faceplate.
Prep	HMI: Reminder - Verify HMI activities event log.

Passing Report

Section FILTER4ATP

LogDate	ID	Tester	Description
5/16/99 15:08:37	2.8.01	SGR	HMI: Is the 283W communication light blinking? [YES]
5/16/99 15:09:11	2.8.02	SGR	HMI: Is the HEAD LOSS now "NORMAL"? [YES]
5/16/99 15:09:21	2.8.03	SGR	HMI: Did the HEAD LOSS return to "HIGH"? [YES]
5/16/99 15:16:26	2.8.04	SGR	HMI: Does the "XMTR FAIL" alarm for the Filter No. 4 Turbidity Transmitter activate? [YES]
5/16/99 15:16:58	2.8.05	SGR	HMI: Is the Filter No. 4 Turbidity = 0 ntu ± 1%? [YES]
5/16/99 15:19:11	2.8.07	SGR	HMI: Does the "XMTR FAIL" alarm for the Filter No. 4 Turbidity Transmitter disappear? [YES]
5/16/99 15:43:11	2.8.11	SGR	Operator: Is the Valve isolated? [YES]
5/16/99 15:43:58	2.8.12	SGR	HMI: Is it not possible to operate the Filter No. 1 Effluent Valve from the HMI? [YES]
5/16/99 15:48:07	2.8.14	SGR	Operator: Does the valve position indicator show about half open? [YES]
5/16/99 15:48:11	2.8.15	SGR	HMI: Is the Filter run time counter advancing? [YES]
5/16/99 15:48:42	2.8.16	SGR	Operator: Is the LCP valve OPEN light ON? [YES]
5/16/99 15:50:19	2.8.17	SGR	Operator: Is the LCP valve CLOSED light ON? [YES]
5/16/99 15:51:58	2.8.18	SGR	Operator: Does the valve indicate OPEN? [YES]
5/16/99 15:54:04	2.8.19	SGR	Operator: Does the valve indicate CLOSED? [YES]
5/16/99 15:54:10	2.8.20	SGR	Operator: Has the valve and surrounding equipment been returned to acceptable configuratio [YES]

Thomas Sweet	5/16/99	Brian C Harrow	5/29/99
DynCorp Test Director	Date	FDNW Project Manager	Date
SG Romer	5/16/99	Will Thomas	5-16-99
FDNW Test Director	Date	Recorder - FDNW	Date
Robert Taylor	5-16-99	[illegible]	6/30/99
Authorized Inspector - FDH	Date	Witness	Date

5/16/99 16:43:36 16:43:36 Page 1 of 1

Exceptions Report

Section FILTER4ATP

LogDate	ID	Tester	RAA	EAA	O	Description
5/16/99 15:17:44	2.8.06	SGR	☐	☒	☐	HMI: Is the Filter No. 4 Turbidity = 10 ntu ± 1%?[No: shows 0.1 - span changed]
5/16/99 15:23:19	2.8.08	SGR	☒	☐	☐	HMI: Is the Filter No. 4 Effluent Flow = 0 gpm ± 8 gpm? Operator: Is the[No: lcp indication = -131]
5/16/99 15:25:57	2.8.09	SGR	☒	☐	☐	HMI: Is the Filter No. 4 Effluent Flow = 800 gpm ± 8 gpm? Operator: Is the Filt[No: low ind < 4 mA]
5/16/99 15:38:06	2.8.10	SGR	☐	☐	☐	Technician: Are the wires reconnected?[No: screw broken]
5/16/99 15:44:50	2.8.13	SGR	☐	☒	☐	HMI: Is the valve CLOSED? Operator: Is the LCP valve CLOSED light ON?[No: hmi: no valve closed ind

RS 2.8.06 } OPS ASSUMES
6/28/99 2.8.13 } RESPONSIBILITY

RS 2.8.08 } RETEST OR
6/28/99 2.8.09 } ACCEPTABLE

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DynCorp Test Director — Date 5/16/99

FDNW Project Manager — Date 5/16/99

FDNW Test Director — Date 5/29/99

Recorder - FDNW — Date 5-16-99

Authorized Inspector -FDH — Date 5-16-99

Witness — Date 6/30/99

5/16/99 16:43:33 — 16:43:33

2.9 Miscellaneous Pump Instrumentation ATP

2.9.01	HMI: Verify HMI is in communication with the 283W PLC. HMI: Is the 283W communication light blinking?
Prep	HMI: Go to the WEST WTP Faceplate and Pagedown.
Prep	HMI: DWG H-2-829239 SH 1 (Ref. for the next steps).
Prep	Technician: Go to the 8" SW Line Flow Transmitter (WX06) (FIT_283W_101A).
Prep	Technician: Lift the wires from terminals OUT (TB6-1) and IN (TB6-2).
2.9.02	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the 8" SW Line Flow = 0 gpm ± 1%?
2.9.03	Technician: Reset the simulator to 20 mA. HMI: Is the 8" SW Line Flow = 2000 gpm ± 1%?
2.9.04	Technician: Land the wires back on terminals OUT (TB6-1) and IN (TB6-2). Technician: Are the wires reconnected?
Prep	Technician: Go to the 8" SW Line Transmitter (XIT_283W_101A).
Prep	Technician: Lift the wires from terminals TB1-A/+ (TB6-40) and TB1-A/- (TB6-41) (WX39) (AI_283W_101A).
2.9.05	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the 8" SW Line pH = 0 pH ± 1%?

2.9.06	Technician: Reset the simulator to 20 mA. HMI: Is the8" SW Line pH = 14 pH ± 1%?
2.9.07	Technician: Land the wires back on terminals TB1-A/+ (TB6-40) and TB1-A/- (TB6-41). HMI: Are the wires reconnected?
Prep	Technician: Go to the 10" SW Line Flow Transmitter (WX07) (FIT_283W_101B).
Prep	Technician: Lift the wires from terminals OUT (+, TB6-4) and IN (-, TB6-5).
2.9.08	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the 10" SW Line Flow = 0 gpm ± 1%?
2.9.09	Technician: Reset the simulator to 20 mA. HMI: Is the 10" SW Line Flow = 4000 gpm ± 1%?
2.9.10	Technician: Land the wires back on terminals OUT (+, TB6-4) and IN (-, TB6-5). Technician: Are the wires reconnected?
Prep	Technician: Go to the 10" SW Line Transmitter (XIT_283W_101B).
Prep	Technician: Lift the wires from terminals A/+ (TB6-31) and A/-(TB6-32) (WX49) (AI_283W_101B).
2.9.11	Technician: Reconnect the wires to the simulator and set to 4 mA. Is the 10" SW Line pH = 0 pH ± 1%?
2.9.12	Technician: Reset the simulator to 20 mA. HMI: Is the 10" SW Line pH = 14 pH ± 1%?

2.9.13	Technician: Land the wires back on terminals A/+ (TB6-31) and A/-(TB6-32). Technician: Are the wires reconnected?
Prep	HMI: DWG H-2-829270 SH 3 (Ref. for the next steps).
Prep	Technician: Go to the VFD-1 Cabinet (WX37) (PIT_283W_003).
Prep	Technician: Lift the wires from terminals TB4-1 (+, TB6-10) and TB4-2 (-, TB6-11). TB4-7 TB4-8 TLS
2.9.14	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the SW 8" line pressure = 0 psig ± 1%?
2.9.15	Technician: Reset the simulator to 20 mA. HMI: Is the SW 8" line pressure = 200 psig ± 1%?
2.9.16	Technician: Land the wires back on terminals ~~TB4-1~~ TB4-7 (+, TB6-10) and ~~TB4-2~~ TB4-8 -, TB6-11) TLS Technician: Are the wires reconnected?
Prep	Technician: Lift the wires from terminals TB1-11 (+,TB6-13) and TB1-12 (-, TB6-14) (WY63) (PIC_283W_003).
Prep	Technician: Reconnect the wires to the multimeter in ADC mode and set to 20 mA range.
Prep	Operator: Go to PUMP 3 - REMOTE at MCC MCC 2, VERIFY PUMP 3 BREAKER IS CLOSED, PLACE TLS
2.9.17	HMI: Go to PUMP 3 - MANUAL. Set the SW Pump No. 3 to 0 %. Technician: Does the multimeter display 4 mA ± 1%?

2.9.18	HMI: Set the SW Pump No. 3 to 100 %. Technician: Does the multimeter display 20 mA ± 1%?
2.9.19	Technician: Land the wires back on terminals TB1-11 (+,TB6-13) and TB1-12 (-, TB6-14). Technician: Are the wires reconnected?
Prep	Technician: Go to the VFD-2 Cabinet (WX38) (PIT_283W_006).
Prep	Technician: Lift the wires from terminals TB4-~~1~~ -7 TRS (+, TB6-16) and TB4-~~2~~ -8 TRS (-, TB6-17).
2.9.20	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the SW 10" line pressure = 0 psig ± 1%?
2.9.21	Technician: Reset the simulator to 20 mA. HMI: Is the SW 10" line pressure = 200 psig ± 1%?
2.9.22	Technician: Land the wires back on terminals TB4-~~1~~ -7 (+, TB6-16) and TB4-~~2~~ -8 TRS (-, TB6-17). Technician: Are the wires reconnected?
Prep	Technician: Lift the wires from terminals TB1-11 (+,TB6-19) and TB1-12 (-, TB6-20) (WY64) (PIC_283W_006).
Prep	Technician: Reconnect the wires to the multimeter in ADC mode and set to 20 mA range.
Prep	Operator: Go to PUMP 6 - REMOTE at MCC MCC 2, VERIFY PUMP6 BREAKER IS CLOSED, PLACE TRS
2.9.23	HMI: Go to PUMP 6 - MANUAL. Set the SW Pump No. 6 to 0 %. Technician: Does the multimeter display 4 mA ± 1%?

2.9.24	HMI: Set the SW Pump No. 6 to 100 %. Technician: Does the multimeter display 20 mA ± 1%?
2.9.25	Technician: Land the wires back on terminals TB1-11 (+,TB6-19) and TB1-12 (-, TB6-20). Technician: Are the wires reconnected?
Prep	HMI: DWG H-2-829270 SH 5 (Ref. for the next steps).
Prep	Technician: Go to the 283W Finished Water Turbidity Transmitter (WX52) (AIT_283W_003).
2.9.26	Technician: Lift the wires from the plus (TB4-FU-4) and minus (TB4-7) terminals. HMI: Does the "XMTR FAIL" alarm for the SW Finished Water Turbidity Transmitter activate?
Prep	HMI: ACK "XMTR FAIL" alarm for the SW Finished Water Turbidity Transmitter.
2.9.27	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the SW Finished Water Turbidity = 0 ntu ± 1%?
2.9.28	Technician: Reset the simulator to 20 mA. HMI: Is the SW Finished Water Turbidity = ~~10~~ .1 ntu ± 1%? TCS
2.9.29	Technician: Land the wires back on the plus (TB4-FU-4) and minus (TB4-7) terminals. HMI: Does the "XMTR FAIL" alarm for the SW Finished Water Turbidity Transmitter clear?
Prep	HMI: Close the WEST WTP Faceplate.
Prep	HMI: Reminder - verify HMI activities on event log.

Passing Report

Section PUMPINSTMATP

LogDate	ID	Tester	Description
5/17/99 10:20:20	2.9.01	SGR	HMI: Is the 283W communication light blinking? [YES]
5/17/99 10:23:30	2.9.02	SGR	HMI: Is the 8" SW Line Flow = 0 gpm ± 1%? [YES]
5/17/99 10:23:37	2.9.03	SGR	HMI: Is the 8" SW Line Flow = 2000 gpm ± 1%? [YES]
5/17/99 10:25:11	2.9.04	SGR	Technician: Are the wires reconnected? [YES]
5/17/99 10:27:08	2.9.05	SGR	HMI: Is the 8" SW Line pH = 0 pH ± 1%? [YES]
5/17/99 10:27:32	2.9.06	SGR	HMI: Is the8" SW Line pH = 14 pH ± 1%? [YES]
5/17/99 10:28:35	2.9.07	SGR	HMI: Are the wires reconnected? [YES]
5/17/99 10:29:16	2.9.08	SGR	HMI: Is the 10" SW Line Flow = 0 gpm ± 1%? [YES]
5/17/99 10:29:26	2.9.09	SGR	HMI: Is the 10" SW Line Flow = 4000 gpm ± 1%? [YES]
5/17/99 10:30:07	2.9.10	SGR	Technician: Are the wires reconnected? [YES]
5/17/99 10:31:42	2.9.11	SGR	Is the 10" SW Line pH = 0 pH ± 1%? [YES]
5/17/99 10:31:48	2.9.12	SGR	HMI: Is the 10" SW Line pH = 14 pH ± 1%? [YES]
5/17/99 10:33:07	2.9.13	SGR	Technician: Are the wires reconnected? [YES]
5/17/99 10:35:03	2.9.14	SGR	HMI: Is the SW 8" line pressure = 0 psig ± 1%? [YES]
5/17/99 10:35:21	2.9.15	SGR	HMI: Is the SW 8" line pressure = 200 psig ± 1%? [YES]
5/17/99 10:35:55	2.9.16	SGR	Technician: Are the wires reconnected? [YES]
5/17/99 10:43:28	2.9.18	SGR	Technician: Does the multimeter display 20 mA ± 1%? [YES]
5/17/99 10:44:48	2.9.19	SGR	Technician: Are the wires reconnected? [YES]
5/17/99 10:47:22	2.9.20	SGR	HMI: Is the SW 10" line pressure = 0 psig ± 1%? [YES]
5/17/99 10:50:14	2.9.21	SGR	HMI: Is the SW 10" line pressure = 200 psig ± 1%? [YES]
5/17/99 10:52:32	2.9.22	SGR	Technician: Are the wires reconnected? [YES]

DynCorp Test Director	5/17/99 Date	FDNW Project Manager	5/29/99 Date
FDNW Test Director	5/17/99 Date	Recorder - FDNW	6/30/99 Date
Authorized Inspector - FDH	5/17/99 Date	Witness	6/30/99 Date

5/17/99 10:55:11	2.9.24	SGR	Technician: Does the multimeter display 20 mA ± 1%? [YES]
5/17/99 10:56:21	2.9.25	SGR	Technician: Are the wires reconnected? [YES]
5/17/99 10:59:21	2.9.26	SGR	HMI: Does the "XMTR FAIL" alarm for the SW Finished Water Turbidity Transmitter activate? [YES]
5/17/99 10:59:35	2.9.27	SGR	HMI: Is the SW Finished Water Turbidity = 0 ntu ± 1%? [YES]
5/17/99 11:00:58	2.9.29	SGR	HMI: Does the "XMTR FAIL" alarm for the SW Finished Water Turbidity Transmitter clear? [YES]

DynCorp Test Director	5/17/99 Date	FDNW Project Manager	6/30/99 Date
FDNW Test Director	5/17/99 Date	Recorder - FDNW	6/30/99 Date
Authorized Inspector - FDH	5/17/99 Date	Witness	6/30/99 Date

Exceptions Report

Section PUMPINSTMATP

LogDate	ID	Tester	RAA	EAA	O	Description
5/17/99 10:42:04	2.9.17	SGR	☐	☒	☐	Technician: Does the multimeter display 4 mA ± 1%?[No: span changed to 0 - 20, OK]
5/17/99 10:54:40	2.9.23	SGR	☐	☒	☐	Technician: Does the multimeter display 4 mA ± 1%?[No: output span now 0-20 mA (OK)]
5/17/99 11:00:01	2.9.28	SGR	☐	☒	☐	HMI: Is the SW Finished Water Turbidity = 10 ntu ± 1%?[No: span changed to 0-0.1 (ok)]

EXCEPTION 2.9.17 - PUMP INPUT SPEED SIGNAL SPAN IS ACTUALLY 0-20mA AND NOT 4-20mA. PLC & HMI PROGRAMMING CHANGED TO ACCOMODATE REQUIRED 0-20mA SPAN.

EXCEPTION 2.9.23 - (SAME AS EXCEPTION 2.9.17 DISPOSITION)

EXCEPTION 29.28 - SPAN CHANGED PER OWNER'S REQUEST TO 0-0.1 NTU FROM 0-10NTU. PLC & HMI PROGRAMMING CHANGED TO ACCOMODATE NEW SPAN.

RS 6/28/99

DynCorp Test Director	5/17/99 Date	FDNW Project Manager	6/30/99 Date	FDNW Test Director	5/17/99 Date
Recorder - FDNW	6/30/99 Date	Authorized Inspector -FDH	5/19/99 Date	Witness	6/30/99 Date

5/17/99 11:06:12 11:06:12

2.10 Sanitary Water Pump 1 ATP

2.10.01	HMI: Verify HMI is in communication with the 283W PLC. HMI: Is the 283W communication light blinking?
Prep	HMI: Testing SW PUMP 1
2.10.02	Test Director: Ensure applicable portions of MISC PUMP INSTRUMENTATION test been run Test Director: Were the test sections completed successfully?
Prep	HMI: Go to the SW PUMP 1 AND 2 Faceplate.
2.10.03	Technician: Ensure motor leads for SW Pump 1 connected Technician: Are the motor leads for SW Pump 1 connected?
2.10.04	Operator: Verify that all other SW pump disconnects are ~~open~~. OFF Operator: Are all SW pump disconnects ~~open~~ OFF except for TLS SW pumps being tested?
Prep	Operator: Close main disconnect of MCC2.
2.10.05	Operator: Close the disconnect on SW Pump 1 motor starter. Technician: Is the SW Pump 1 motor starter control Voltage transformer = 120VAC ± 5%?
Prep	HMI: Have another test operator go to the SW Pump 1 local control station in the basement.
2.10.06	Operator: Place Hand/Off/Auto switch on motor starter cubicle face in HAND. HMI: Is the LOCAL CONTROL indicator flashing yellow?

2.10.07	Operator: Push the SW Pump 1 Local Start pushbutton (PB). Operator: Did the SW Pump 1 START and the SW Pump 1 ON light illuminate? HMI: Pump 1 ON?
2.10.08	Operator: Push SW Pump 1 local Emergency Stop PB. Operator: Did SW pump 1 STOP? HMI: Pump 1 OFF?
2.10.09	Operator: Push the SW Pump 1 motor starter Start PB. MCC Operator: Did the SW Pump 1 motor starter remain de-energized?
2.10.10	Operator: Pull out (reset) the SW Pump 1 local Emergency Stop PB. Operator: Did the SW Pump 1 motor starter remain de-energized?
2.10.11	Operator: Push the SW Pump 1 motor starter Start PB again. MCC Operator: Did SW Pump 1 START?
2.10.12	Operator: Push the SW Pump 1 motor starter Stop PB. MCC Operator: Did SW Pump 1 STOP?
2.10.13	Operator: Place Hand/Off/Auto switch on SW Pump 1 motor starter cubicle face in AUTO. HMI: Is the LOCAL CONTROL indicator WHITE?
Prep	HMI: Go to the SW PUMP 1 & 2 Faceplate.
2.10.14	HMI: Put the Manual-Off-Auto switch in MANUAL and click PUMP 1 - START. Operator: Did SW Pump 1 START?
2.10.15	Operator: Push the SW Pump 1 local Emergency Stop PB. Operator: Did SW Pump 1 STOP?
2.10.16	Operator Pull out (reset) the SW Pump 1 local Emergency Stop PB. Operator: Did the SW Pump 1 motor starter remain de-energized?

2.10.17	Operator: Push the SW Pump 1 local Start PB. Operator: Did the SW Pump 1 motor starter remain de-energized?
2.10.18	HMI: Click PUMP 1 - START Operator: Did SW Pump 1 START?
2.10.19	HMI: Click PUMP 1 - STOP Operator: Did SW Pump 1 STOP?
2.10.20	Operator: Place the SW Pump 1 Hand/Off/Auto switch on motor starter cubicle face in Off position. HMI: Is the LOCAL CONTROL indicator flashing yellow?
2.10.21	HMI: Click PUMP 1 - START Operator: Did the SW Pump 1 motor starter remain de-energized?
2.10.22	Operator: Push the SW Pump 1 local Start PB. HMI: Did the SW Pump 1 motor starter remain de-energized?
Prep	HMI: Close PUMP 1 AND 2 FACEPLATE and verify event log.

Passing Report

Section PUMP1ATP

LogDate	ID	Tester	Description
5/17/99 12:31:37	2.10.01	SGR	HMI: Is the 283W communication light blinking? [YES]
5/17/99 12:32:13	2.10.02	SGR	Test Director: Were the test sections completed successfully? [YES]
5/17/99 12:33:58	2.10.04	SGR	Operator: Are all SW pump disconnects open except for SW pumps being tested? [YES]
5/17/99 12:41:26	2.10.06	SGR	HMI: Is the LOCAL CONTROL indicator flashing yellow? [YES]
5/17/99 12:42:04	2.10.07	SGR	Operator: Did the SW Pump 1 START and the SW Pump 1 ON light illuminate? HMI: Pump 1 ON? [YES]
5/17/99 12:42:25	2.10.08	SGR	Operator: Did SW pump 1 STOP? HMI: Pump 1 OFF? [YES]
5/17/99 12:43:05	2.10.09	SGR	Operator: Did the SW Pump 1 motor starter remain de-energized? [YES]
5/17/99 12:43:28	2.10.10	SGR	Operator: Did the SW Pump 1 motor starter remain de-energized? [YES]
5/17/99 12:43:50	2.10.11	SGR	Operator: Did SW Pump 1 START? [YES]
5/17/99 12:51:51	2.10.12	SGR	Operator: Did SW Pump 1 STOP? [YES]
5/17/99 12:54:44	2.10.13	SGR	HMI: Is the LOCAL CONTROL indicator WHITE? [YES]
5/17/99 13:00:02	2.10.14	SGR	Operator: Did SW Pump 1 START? [YES]
5/17/99 13:00:39	2.10.15	SGR	Operator: Did SW Pump 1 STOP? [YES]
5/17/99 13:01:20	2.10.16	SGR	Operator: Did the SW Pump 1 motor starter remain de-energized? [YES]
5/17/99 13:02:04	2.10.17	SGR	Operator: Did the SW Pump 1 motor starter remain de-energized? [YES]
5/17/99 13:02:21	2.10.18	SGR	Operator: Did SW Pump 1 START? [YES]
5/17/99 13:03:05	2.10.19	SGR	Operator: Did SW Pump 1 STOP? [YES]
5/17/99 13:03:27	2.10.20	SGR	HMI: Is the LOCAL CONTROL indicator flashing yellow? [YES]
5/17/99 13:03:33	2.10.21	SGR	Operator: Did the SW Pump 1 motor starter remain de-energized? [YES]
5/17/99 13:04:04	2.10.22	SGR	HMI: Did the SW Pump 1 motor starter remain de-energized? [YES]

Thomas Sweet	5/17/99	Brian Chavez	6/30/99
DynCorp Test Director	Date	FDNW Project Manager	Date
SG Romero	5/17/99	Will Thomas	6/30/99
FDNW Test Director	Date	Recorder - FDNW	Date
[illegible] for: Ed Enloe	5/19/99 5/17/99	[illegible]	6/30/99
Authorized Inspector - FDH	Date	Witness	Date

Exceptions Report

Section PUMP1ATP

LogDate	ID	Tester	RAA	EAA	O	Description
5/17/99 12:33:01	2.10.03	SGR	☐	☒	☐	Technician: Are the motor leads for SW Pump 1 connected?[No: not connecting this run]
5/17/99 12:36:50	2.10.05	SGR	☐	☒	☐	Technician: Is the SW Pump 1 motor starter control Voltage transformer = 120VAC ± 5%?[No: removing

EXCEPTION 2.10.03 - OPERATIONS DECISION NOT TO RUN PUMPS AND POSSIBLY PUMP CONTAMINATED WATER INTO GRID. THIS STEP FROM TEST. TRS

EXCEPTION 2.10.05 - NOT NECESSARY SINCE CONTROL VOLTAGE SUFFICIENT TO PULL IN STARTER & MAKE LIGHTS ILLUMINATED AND PLC INPUTS ENERGIZED.
6/28/99
TRS

Thomas Swift	5/17/99	Brian Chavez	6/30/99	Sg Romero	5/17/99
DynCorp Test Director	Date	FDNW Project Manager	Date	FDNW Test Director	Date
Will Thomas	6/30/99	For: Ed Enloe	5/19/99	Witness	6/30/99
Recorder - FDNW	Date	Authorized Inspector -FDH	Date		Date
5/17/99 13:07:34	13:07:34				

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2.11 Sanitary Water Pump 2 ATP

2.11.01	HMI: Verify HMI is in communication with the 283W PLC. HMI: Is the 283W communication light blinking?
Prep	HMI: Testing SW PUMP 2
2.11.02	Test Director: Ensure applicable portions of MISC PUMP INSTRUMENTATION test been run Test Director: Were the test sections completed successfully?
Prep	HMI: Go to the SW PUMP 1 AND 2 Faceplate.
2.11.03	Technician: Ensure motor leads for SW Pump 2 connected Technician: Are the motor leads for SW Pump 2 connected?
2.11.04	Operator: Verify that all other SW pump disconnects are ~~open~~. OFF TLS Operator: Are all SW pump disconnects ~~open~~ OFF except for SW pumps being tested? TLS
Prep	Operator: Close main disconnect of MCC2.
2.11.05	Operator: Close the disconnect on SW Pump 2 motor starter. Technician: Is the SW Pump 2 motor starter control Voltage transformer = 120VAC ± 5%?
Prep	HMI: Have another test operator go to the SW Pump 2 local control station in the basement.
2.11.06	Operator: Place Hand/Off/Auto switch on motor starter cubicle face in HAND. HMI: Is the LOCAL CONTROL indicator flashing yellow?

2.11.07	Operator: Push the SW Pump 2 Local Start pushbutton (PB). Operator: Did the SW Pump 2 START and the SW Pump 2 ON light illuminate? HMI: Pump 2 ON?
2.11.08	Operator: Push SW Pump 2 local Emergency Stop PB. Operator: Did SW pump 2 STOP? HMI: Pump 2 OFF?
2.11.09	Operator: Push the SW Pump 2 motor starter Start PB. MCC RS Operator: Did the SW Pump 2 motor starter remain de-energized?
2.11.10	Operator: Pull out (reset) the SW Pump 2 local Emergency Stop PB. Operator: Did the SW Pump 2 motor starter remain de-energized?
2.11.11	Operator: Push the SW Pump 2 motor starter Start PB again. MCC TCS Operator: Did SW Pump 2 START?
2.11.12	Operator: Push the SW Pump 2 motor starter Stop PB. MCC TCS Operator: Did SW Pump 2 STOP?
2.11.13	Operator: Place Hand/Off/Auto switch on SW Pump 2 motor starter cubicle face in AUTO. HMI: Is the LOCAL CONTROL indicator WHITE?
Prep	HMI: Go to the SW PUMP 2 & 2 Faceplate.
2.11.14	HMI: Put the Manual-Off-Auto switch in MANUAL and click PUMP 2 - START. Operator: Did SW Pump 2 START?
2.11.15	Operator: Push the SW Pump 2 local Emergency Stop PB. Operator: Did SW Pump 2 STOP?
2.11.16	Operator Pull out (reset) the SW Pump 2 local Emergency Stop PB. Operator: Did the SW Pump 2 motor starter remain de-energized?

2.11.17	Operator: Push the SW Pump 2 local Start PB. Operator: Did the SW Pump 2 motor starter remain de-energized?
2.11.18	HMI: Click PUMP 2 - START Operator: Did SW Pump 2 START?
2.11.19	HMI: Click PUMP 2 - STOP Operator: Did SW Pump 2 STOP?
2.11.20	Operator: Place the SW Pump 2 Hand/Off/Auto switch on motor starter cubicle face in Off position. HMI: Is the LOCAL CONTROL indicator flashing yellow?
2.11.21	HMI: Click PUMP 2 - START Operator: Did the SW Pump 2 motor starter remain de-energized?
2.11.22	Operator: Push the SW Pump 2 local Start PB. HMI: Did the SW Pump 2 motor starter remain de-energized?
Prep	HMI: Close PUMP 1 AND 2 FACEPLATE and verify event log.

Passing Report

Section PUMP2ATP

LogDate	ID	Tester	Description
5/17/99 13:08:21	2.11.01	SGR	HMI: Is the 283W communication light blinking? [YES]
5/17/99 13:11:23	2.11.02	SGR	Test Director: Were the test sections completed successfully? [YES]
5/17/99 13:12:34	2.11.04	SGR	Operator: Are all SW pump disconnects open except for SW pumps being tested? [YES]
5/17/99 13:16:16	2.11.06	SGR	HMI: Is the LOCAL CONTROL indicator flashing yellow? [YES]
5/17/99 13:16:46	2.11.07	SGR	Operator: Did the SW Pump 2 START and the SW Pump 2 ON light illuminate? HMI: Pump 2 ON? [YES]
5/17/99 13:17:13	2.11.08	SGR	Operator: Did SW pump 2 STOP? HMI: Pump 2 OFF? [YES]
5/17/99 13:17:28	2.11.09	SGR	Operator: Did the SW Pump 2 motor starter remain de-energized? [YES]
5/17/99 13:17:54	2.11.10	SGR	Operator: Did the SW Pump 2 motor starter remain de-energized? [YES]
5/17/99 13:18:19	2.11.11	SGR	Operator: Did SW Pump 2 START? [YES]
5/17/99 13:18:33	2.11.12	SGR	Operator: Did SW Pump 2 STOP? [YES]
5/17/99 13:18:55	2.11.13	SGR	HMI: Is the LOCAL CONTROL indicator WHITE? [YES]
5/17/99 13:19:29	2.11.14	SGR	Operator: Did SW Pump 2 START? [YES]
5/17/99 13:19:43	2.11.15	SGR	Operator: Did SW Pump 2 STOP? [YES]
5/17/99 13:20:12	2.11.16	SGR	Operator: Did the SW Pump 2 motor starter remain de-energized? [YES]
5/17/99 13:20:41	2.11.17	SGR	Operator: Did the SW Pump 2 motor starter remain de-energized? [YES]
5/17/99 13:20:58	2.11.18	SGR	Operator: Did SW Pump 2 START? [YES]
5/17/99 13:21:24	2.11.19	SGR	Operator: Did SW Pump 2 STOP? [YES]
5/17/99 13:21:47	2.11.20	SGR	HMI: Is the LOCAL CONTROL indicator flashing yellow? [YES]
5/17/99 13:22:02	2.11.21	SGR	Operator: Did the SW Pump 2 motor starter remain de-energized? [YES]
5/17/99 13:22:11	2.11.22	SGR	HMI: Did the SW Pump 2 motor starter remain de-energized? [YES]

Thomas Smith	5/17/99	David C Hanson	5/29/99
DynCorp Test Director	Date	FDNW Project Manager	Date
SG Romero	5/17/99	Wil Thorne	6/30/99
FDNW Test Director	Date	Recorder - FDNW	Date
R Dyl for: Ed Enloe	5/19/99 5/17/99	[illegible]	6/2/99
Authorized Inspector - FDH	Date	Witness	Date

5/17/99 13:23:40 13:23:40 Page 1 of 1

Exceptions Report

Section PUMP2ATP

LogDate	ID	Tester	RAA	EAA	O	Description
5/17/99 13:12:12	2.11.03	SGR	☐	☒	☐	Technician: Are the motor leads for SW Pump 2 connected?[No: del step]
5/17/99 13:13:36	2.11.05	SGR	☐	☒	☐	Technician: Is the SW Pump 2 motor starter control Voltage transformer = 120VAC ± 5%?[No: remove]

EXCEPTION 2.11.03 – OPERATIONS DECISION NOT TO CONNECT MOTOR LEADS IN CASE WATER OF NOT SUFFICIENT QUALITY TO ENTER GRID.

EXCEPTION 2.11.05 – UNNECESSARY SINCE PROPER CONTROL VOLTAGE WILL BE BORNE OUT BY MOTOR STARTER PULLING IN, LIGHTS ILLUMINATING, ETC.
6/28/99

Thomas Smith	5/17/99	Brian C Hanson	5/29/99	S J Romer	5/17/99
DynCorp Test Director	Date	FDNW Project Manager	Date	FDNW Test Director	Date
Will Thom	6/30/99	E Erlebach	5/17/99	[illegible]	6/30/99
Recorder - FDNW	Date	Authorized Inspector -FDH	Date	Witness	Date

5/17/99 13:23:37 13:23:37

2.12 Sanitary Water Pump 3 ATP

2.12.01	HMI: Ensure HMI is in communication with the 283W PLC. HMI: Is the 283W communication light blinking?
2.12.02	Test Director: Ensure applicable portions of MISC PUMP INSTRUMENTATION test been run Test Director: Were the test sections completed successfully?
Prep	Testing SW PUMP 3 motor Starter and VFD controls
Prep	HMI: Go to the SW PUMP 3 Faceplate.
2.12.03	Technician: Ensure motor leads for SW PUMP 3 disconnected Technician: Are the motor leads for SW PUMP 3 disconnected?
Prep	Operator: Close main disconnect of MCC2.
2.12.04	Operator: Close the disconnect on SW PUMP 3 motor Starter. Operator: Disconnect in ON position?
2.12.05	Operator: Ensure that all other SW pump disconnects are open. Operator: Are all SW pump disconnects open except for SW pumps being tested?
2.12.03	Operator: At the SW PUMP 3 MCC cubicle, place Local/Remote switch in the REMOTE position. HMI: Is the LOCAL CONTROL indicator WHITE?
Prep	Test Director: Have another test operator go to the SW PUMP 3 local control station in the basement.

2.12.07	Operator: At VFD-1, push AUTO and AUTO REF buttons Operator: Did AUTO and AUTO REF lights come on?
2.12.08	HMI: Place the Auto-Man switch in MANUAL and set output = 0%. HMI: Is the MANUAL switch green?
2.12.09	HMI: Click PUMP 3 - START Operator: Did SW PUMP 3 START? HMI: PUMP 3 ON?
2.12.10	HMI: Increase PUMP 3 SPEED to 50% Operator: Is PUMP 3 running 50% of operating range?
2.12.11	HMI: Click PUMP 3 - STOP Operator: Did SW PUMP 3 STOP? HMI: PUMP 3 OFF?
2.12.12	Operator: Push and release SW PUMP 3 Local START Operator: Did SW PUMP 3 REMAIN OFF?
2.12.13	HMI: Click PUMP 3 - START Operator: Did SW PUMP 3 START?
2.12.14	Operator: Push and release SW PUMP 3 Local STOP Operator: Did SW PUMP 3 STOP? HMI: PUMP 3 OFF?
2.12.15	HMI: Click PUMP 3 - START Operator: Did SW PUMP 3 REMAIN OFF?
2.12.16	Operator: Push and release SW PUMP 3 Local START Operator: Did SW PUMP 3 REMAIN OFF?
2.12.17	Operator: At VFD-1, press OFF, then AUTO on keypad Operator: Are AUTO and AUTO REF lights ON?

2.12.18	Operator: At the SW PUMP 3 MCC cubicle, place Local/Remote switch in the LOCAL position. HMI: Is the LOCAL CONTROL indicator FLASHING YELLOW?
2.12.19	Operator: Push and release SW PUMP 3 Local START Operator: Is PUMP 3 running? HMI: PUMP 3 ON?
2.12.20	HMI: Click PUMP 3 - STOP Operator: Does PUMP 3 remain ON?
2.12.21	Operator: Push and release SW PUMP 3 Local STOP Operator: Did PUMP 3 STOP? HMI: PUMP 3 OFF?
2.12.22	HMI: Click PUMP 3 - START Operator: Did SW PUMP 3 REMAIN OFF?
2.12.23	Operator: Push and release SW PUMP 3 Local START Operator: Did SW PUMP 3 REMAIN OFF?
2.12.24	Operator: At VFD-1, press OFF, then AUTO on keypad Operator: Are AUTO and AUTO REF lights ON?
Prep	HMI: Close PUMP 3 FACEPLATE and verify event log.

Passing Report

Section PUMP3ATP

LogDate	ID	Tester	Description
5/18/99 17:46:44	2.12.01	SGR	HMI: Is the 283W communication light blinking? [YES]
5/18/99 17:46:55	2.12.02	SGR	Test Director: Were the test sections completed successfully? [YES]
5/18/99 17:48:26	2.12.03	SGR	Technician: Are the motor leads for SW PUMP 3 disconnected? [YES]
5/18/99 17:49:12	2.12.04	SGR	Operator: Disconnect in ON position? [YES]
5/18/99 17:49:43	2.12.05	SGR	Operator: Are all SW pump disconnects open except for SW pumps being tested? [YES]
5/18/99 17:50:30	2.12.03	SGR	HMI: Is the LOCAL CONTROL indicator WHITE? [YES]
5/18/99 17:51:17	2.12.07	SGR	Operator: Did AUTO and AUTO REF lights come on? [YES]
5/18/99 17:51:31	2.12.08	SGR	HMI: Is the MANUAL switch green? [YES]
5/18/99 17:51:49	2.12.09	SGR	Operator: Did SW PUMP 3 START? HMI: PUMP 3 ON? [YES]
5/18/99 17:52:24	2.12.10	SGR	Operator: Is PUMP 3 running 50% of operating range? [YES]
5/18/99 17:52:49	2.12.11	SGR	Operator: Did SW PUMP 3 STOP? HMI: PUMP 3 OFF? [YES]
5/18/99 17:53:14	2.12.12	SGR	Operator: Did SW PUMP 3 REMAIN OFF? [YES]
5/18/99 17:53:28	2.12.13	SGR	Operator: Did SW PUMP 3 START? [YES]
5/18/99 17:53:55	2.12.14	SGR	Operator: Did SW PUMP 3 STOP? HMI: PUMP 3 OFF? [YES]
5/18/99 17:54:22	2.12.15	SGR	Operator: Did SW PUMP 3 REMAIN OFF? [YES]
5/18/99 17:54:43	2.12.16	SGR	Operator: Did SW PUMP 3 REMAIN OFF? [YES]
5/18/99 17:55:09	2.12.17	SGR	Operator: Are AUTO and AUTO REF lights ON? [YES]
5/18/99 17:55:40	2.12.18	SGR	HMI: Is the LOCAL CONTROL indicator FLASHING YELLOW? [YES]
5/18/99 17:56:04	2.12.19	SGR	Operator: Is PUMP 3 running? HMI: PUMP 3 ON? [YES]
5/18/99 17:56:38	2.12.20	SGR	Operator: Does PUMP 3 remain ON? [YES]

DynCorp Test Director	5/18/99 Date	FDNW Project Manager	5/29/99 Date
FDNW Test Director	5/18/99 Date	Recorder - FDNW	6/30/99 Date
Authorized Inspector - FDH	5/18/99 Date	Witness	5/18/99 Date

5/18/99 17:57:04	2.12.21	SGR	Operator: Did PUMP 3 STOP? HMI: PUMP 3 OFF? [YES]
5/18/99 17:57:22	2.12.22	SGR	Operator: Did SW PUMP 3 REMAIN OFF? [YES]
5/18/99 17:57:49	2.12.23	SGR	Operator: Did SW PUMP 3 REMAIN OFF? [YES]
5/18/99 17:58:14	2.12.24	SGR	Operator: Are AUTO and AUTO REF lights ON? [YES]

DynCorp Test Director	5/18/99 Date	FDNW Project Manager	5/29/99 Date
FDNW Test Director	5/18/99 Date	Recorder - FDNW	6/30/99 Date
Authorized Inspector - FDH	5/18/99 Date	Witness	5/18/99 Date

Exceptions Report

Section 2-12 SW PUMP 3 ATP

LogDate	ID	Tester	RAA	EAA	O	Description

* NO EXCEPTIONS

Thomas Smith	5/18/99	Brian C. Hanrahan	5/29/99.	Sy Romero	5/18/99
DynCorp Test Director	Date	FDNW Project Manager	Date	FDNW Test Director	Date
Will Thomas	6/30/99	[illegible]	5/18/99	[illegible]	5/18/99
Recorder - FDNW	Date	Authorized Inspector -FDH	Date	Witness	Date

2.13 Sanitary Water Pump 6 ATP

2.13.01	HMI: Ensure HMI is in communication with the 283W PLC. HMI: Is the 283W communication light blinking?
2.13.02	Test Director: Ensure applicable portions of MISC PUMP INSTRUMENTATION test been run Test Director: Were the test sections completed successfully?
Prep	Testing SW PUMP 6 motor Starter and VFD controls
Prep	HMI: Go to the SW PUMP 6 Faceplate.
2.13.03	Technician: Ensure motor leads for SW PUMP 6 disconnected Technician: Are the motor leads for SW PUMP 6 disconnected?
Prep	Operator: Close main disconnect of MCC2.
2.13.04	Operator: Close the disconnect on SW PUMP 6 motor Starter. Operator: Disconnect in ON position?
2.13.05	Operator: Ensure that all other SW pump disconnects are open. Operator: Are all SW pump disconnects open except for SW pumps being tested?
2.13.03	Operator: At the SW PUMP 6 MCC cubicle, place Local/Remote switch in the REMOTE position. HMI: Is the LOCAL CONTROL indicator WHITE?
Prep	Test Director: Have another test operator go to the SW PUMP 6 local control station in the basement.

2.13.07	Operator: At VFD-2, push AUTO and AUTO REF buttons Operator: Did AUTO and AUTO REF lights come on?
2.13.08	HMI: Place the Auto-Man switch in MANUAL and set output = 0%. HMI: Is the MANUAL switch green?
2.13.09	HMI: Click PUMP 6 - START Operator: Did SW PUMP 6 START? HMI: PUMP 6 ON?
2.13.10	HMI: Increase PUMP 6 SPEED to 50% Operator: Is PUMP 6 running 50% of operating range?
2.13.11	HMI: Click PUMP 6 - STOP Operator: Did SW PUMP 6 STOP? HMI: PUMP 6 OFF?
2.13.12	Operator: Push and release SW PUMP 6 Local START Operator: Did SW PUMP 6 REMAIN OFF?
2.13.13	HMI: Click PUMP 6 - START Operator: Did SW PUMP 6 START?
2.13.14	Operator: Push and release SW PUMP 6 Local STOP Operator: Did SW PUMP 6 STOP? HMI: PUMP 6 OFF?
2.13.15	HMI: Click PUMP 6 - START Operator: Did SW PUMP 6 REMAIN OFF?
2.13.16	Operator: Push and release SW PUMP 6 Local START Operator: Did SW PUMP 6 REMAIN OFF?
2.13.17	Operator: At VFD-2, press OFF, then AUTO on keypad Operator: Are AUTO and AUTO REF lights ON?

2.13.18	Operator: At the SW PUMP 6 MCC cubicle, place Local/Remote switch in the LOCAL position. HMI: Is the LOCAL CONTROL indicator FLASHING YELLOW?
2.13.19	Operator: Push and release SW PUMP 6 Local START Operator: Is PUMP 6 running? HMI: PUMP 6 ON?
2.13.20	HMI: Click PUMP 6 - STOP Operator: Does PUMP 6 remain ON?
2.13.21	Operator: Push and release SW PUMP 6 Local STOP Operator: Did PUMP 6 STOP? HMI: PUMP 6 OFF?
2.13.22	HMI: Click PUMP 6 - START Operator: Did SW PUMP 6 REMAIN OFF?
2.13.23	Operator: Push and release SW PUMP 6 Local START Operator: Did SW PUMP 6 REMAIN OFF?
2.13.24	Operator: At VFD-2, press OFF, then AUTO on keypad Operator: Are AUTO and AUTO REF lights ON?
Prep	HMI: Close PUMP 6 FACEPLATE and verify event log.

Passing Report

Section PUMP6ATP

LogDate	ID	Tester	Description
5/18/99 17:59:38	2.13.01	SGR	HMI: Is the 283W communication light blinking? [YES]
5/18/99 17:59:45	2.13.02	SGR	Test Director: Were the test sections completed successfully? [YES]
5/18/99 18:00:37	2.13.03	SGR	Technician: Are the motor leads for SW PUMP 6 disconnected? [YES]
5/18/99 18:01:08	2.13.04	SGR	Operator: Disconnect in ON position? [YES]
5/18/99 18:01:23	2.13.05	SGR	Operator: Are all SW pump disconnects open except for SW pumps being tested? [YES]
5/18/99 18:01:45	2.13.03	SGR	HMI: Is the LOCAL CONTROL indicator WHITE? [YES]
5/18/99 18:02:13	2.13.07	SGR	Operator: Did AUTO and AUTO REF lights come on? [YES]
5/18/99 18:02:23	2.13.08	SGR	HMI: Is the MANUAL switch green? [YES]
5/18/99 18:02:43	2.13.09	SGR	Operator: Did SW PUMP 6 START? HMI: PUMP 6 ON? [YES]
5/18/99 18:03:04	2.13.10	SGR	Operator: Is PUMP 6 running 50% of operating range? [YES]
5/18/99 18:03:31	2.13.11	SGR	Operator: Did SW PUMP 6 STOP? HMI: PUMP 6 OFF? [YES]
5/18/99 18:03:49	2.13.12	SGR	Operator: Did SW PUMP 6 REMAIN OFF? [YES]
5/18/99 18:04:13	2.13.13	SGR	Operator: Did SW PUMP 6 START? [YES]
5/18/99 18:04:32	2.13.14	SGR	Operator: Did SW PUMP 6 STOP? HMI: PUMP 6 OFF? [YES]
5/18/99 18:04:50	2.13.15	SGR	Operator: Did SW PUMP 6 REMAIN OFF? [YES]
5/18/99 18:05:08	2.13.16	SGR	Operator: Did SW PUMP 6 REMAIN OFF? [YES]
5/18/99 18:05:32	2.13.17	SGR	Operator: Are AUTO and AUTO REF lights ON? [YES]
5/18/99 18:05:49	2.13.18	SGR	HMI: Is the LOCAL CONTROL indicator FLASHING YELLOW? [YES]
5/18/99 18:06:05	2.13.19	SGR	Operator: Is PUMP 6 running? HMI: PUMP 6 ON? [YES]
5/18/99 18:06:21	2.13.20	SGR	Operator: Does PUMP 6 remain ON? [YES]

Thomas Swart	5/18/99	Brian C Hanan	5/28/99
DynCorp Test Director	Date	FDNW Project Manager	Date
SJ Romero	5/18/99	Bill For Will Thomas	6/30/99
FDNW Test Director	Date	Recorder - FDNW	Date
[illegible]	5/18/99	[illegible]	5/18/99
Authorized Inspector - FDH	Date	Witness	Date

5/18/99 18:06:40	2.13.21	SGR	Operator: Did PUMP 6 STOP? HMI: PUMP 6 OFF? [YES]
5/18/99 18:06:56	2.13.22	SGR	Operator: Did SW PUMP 6 REMAIN OFF? [YES]
5/18/99 18:07:16	2.13.23	SGR	Operator: Did SW PUMP 6 REMAIN OFF? [YES]
5/18/99 18:07:50	2.13.24	SGR	Operator: Are AUTO and AUTO REF lights ON? [YES]

DynCorp Test Director	5/18/99 Date	FDNW Project Manager	5/29/99 Date
FDNW Test Director	6/30/99 Date	Recorder - FDNW	6/30/99 Date
Authorized Inspector - FDH	5/18/99 Date	Witness	6/30/99 Date

Exceptions Report

Section 2.13 SW PUMP 6 ATP

LogDate	ID	Tester	RAA	EAA	O	Description
			☐	☐	☐	

* NO EXCEPTIONS

DynCorp Test Director	5/18/99 Date	FDNW Project Manager	5/19/99 Date	FDNW Test Director	5/18/99 Date
Recorder - FDNW	6/30/99 Date	Authorized Inspector -FDH	5/18/99 Date	Witness	6/30/99 Date

5/18/99 18:11:45 18:11:45 Page 1 of 1

2.14 Alum Feeder Controls ATP

Prep	HMI: Go to the ALUM CONTROL Faceplate.
Prep	HMI: DWG H-2-827272 SH 5 & ECN L-286-010 (Ref. for the next steps).
2.14.01	HMI: Select ALUM - MANUAL, ALUM - STOP. Operator: Are both alum feeders STOPPED?
2.14.02	Operator: Set ALUM FEEDER #1 in REMOTE/~~AUTO~~ RUN, ALUM FEEDER #2 in LOCAL/~~MANUAL~~ STOP. TLS Operator: Are both switches set?
2.14.03	HMI: Select ALUM - START. Operator: Did ALUM FEEDER #1 START? HMI: alum RUNNING?
Prep	Technician: Go to MCB.
2.14.04	Technician: Apply jumper between TB3A-19 and TB3B-19. Operator: Did ALUM FEEDER ~~#2~~ #1 STOP? HMI: Did ALUM FDR #1 ALARM activate on CURRENT ALARMS screen? TLS
Prep	HMI: ACK alarm on CURRENT ALARMS screen.
2.14.05	Technician: Remove jumper from TB3A-19 and TB3B-19. Operator: Did ALUM FEEDER ~~#2~~ #1 START? HMI: Did ALUM FDR #1 ALARM clear on CURRENT ALARMS screen? TLS
2.14.06	HMI: Select ALUM - STOP. Operator: Did ALUM FEEDER #1 STOP? HMI: alum STOPPED

2.14.07	Operator: Set ALUM FEEDER #2 in REMOTE/~~AUTO~~ RUN, ALUM FEEDER #1 in LOCAL/~~MANUAL~~ STOP. TLS Operator: Are both switches set?
2.14.08	HMI: Select ALUM - START. Operator: Did ALUM FEEDER #2 START? HMI: alum RUNNING?
Prep	Technician: Go to MCB.
2.14.09	Technician: Apply jumper to TB3A-19 and TB3B-19. Operator: Did ALUM FEEDER #2 STOP? HMI: Did ALUM FDR #1 ALARM activate on CURRENT ALARMS screen?
Prep	HMI: ACK alarm on CURRENT ALARMS screen.
2.14.10	Technician: Remove jumper from TB3A-19 and TB3B-19. Operator: Did ALUM FEEDER #2 START? HMI: Did ALUM FDR #1 ALARM clear on CURRENT ALARMS screen?
2.14.11	HMI: Select ALUM - STOP. Operator: Did ALUM FEEDER #2 STOP? HMI: alum STOPPED
2.14.12	Operator: Set ALUM FEEDER #2 in LOCAL/~~MANUAL~~. RUN Operator: Are both alum feeders in MANUAL?
Prep	HMI: Close the ALUM CONTROL Faceplate and verify HMI activities on event log.

Passing Report

Section ALUMFEEDATP

LogDate	ID	Tester	Description
5/17/99 13:29:02	2.14.01	SGR	Operator: Are both alum feeders STOPPED? [YES]
5/17/99 13:29:16	2.14.02	SGR	Operator: Are both switches set? [YES]
5/17/99 13:30:01	2.14.03	SGR	Operator: Did ALUM FEEDER #1 START? HMI: alum RUNNING? [YES]
5/17/99 13:45:29	2.14.05	SGR	Operator: Did ALUM FEEDER #2 START? HMI: Did ALUM FDR #1 ALARM clear on CURRENT ALARMS scr [YES]
5/17/99 13:46:14	2.14.06	SGR	Operator: Did ALUM FEEDER #1 STOP? HMI: alum STOPPED [YES]
5/17/99 13:46:31	2.14.07	SGR	Operator: Are both switches set? [YES]
5/17/99 13:46:48	2.14.08	SGR	Operator: Did ALUM FEEDER #2 START? HMI: alum RUNNING? [YES]
5/17/99 13:48:14	2.14.11	SGR	Operator: Did ALUM FEEDER #2 STOP? HMI: alum STOPPED [YES]
5/17/99 13:48:23	2.14.12	SGR	Operator: Are both alum feeders in MANUAL? [YES]

DynCorp Test Director	Date 5/17/99	FDNW Project Manager	Date 5/29/99
FDNW Test Director	Date 5/29/99	Recorder - FDNW	Date 6/30/99
Authorized Inspector - FDH	Date 6-10-99	Witness	Date 6/30/99

Exceptions Report

Section ALUMFEEDATP

LogDate	ID	Tester	RAA	EAA	O	Description
5/17/99 13:35:21	2.14.04	SGR	☒	☐	☐	Operator: Did ALUM FEEDER #2 STOP? HMI: Did ALUM FDR #1 ALARM activate on CURRENT ALARMS screen?[No
5/17/99 13:47:31	2.14.09	SGR	☒	☐	☐	Operator: Did ALUM FEEDER #2 STOP? HMI: Did ALUM FDR #1 ALARM activate on CURRENT ALARMS screen?[No
5/17/99 13:47:45	2.14.10	SGR	☒	☐	☐	Operator: Did ALUM FEEDER #2 START? HMI: Did ALUM FDR #1 ALARM clear on CURRENT ALARMS screen?[No:

STEP 2.14.04, 2.14.09, 2.14.10 — RETESTED 5/19/99 (AFTER TROUBLESHOOTING + REPAIR) of FEEDERS #1 & #2 PASSED TEST.

Thomas Smart 5/19/99

[signature] 5/19/99

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Thomas Smart	5/17/99	[signature]	5/29/99	[signature]	5/29/99
DynCorp Test Director	Date	FDNW Project Manager	Date	FDNW Test Director	Date
[signature]	6/30/99	[signature] For: Ed Evloe	5/17/99	[signature]	6/30/99
Recorder - FDNW	Date	Authorized Inspector -FDH	Date	Witness	Date

5/17/99 13:50:37 13:50:37 Page 1 of 1

2.15 Makeup Water Valve ATP

2.15.01	HMI: Verify HMI is in communication with the 283W PLC. HMI: Is the 283W communication light blinking?
Prep	HMI: Go to the WEST MAKEUP WATER Faceplate.
Prep	Technician: Go to the Makeup Water Valve (MOV_283W_009).
2.15.02	Technician: Disconnect 4 - 20 mA signal leads and connect to multimeter in 20 mA range Technician: Are the wires connected?
2.15.03	HMI: Select Makeup Water Valve - MANUAL HMI: Does the switch indicate MANUAL?
2.15.04	HMI: Increase manual setting to 50%. Technician: Is the signal at the valve 12.0 ± 0.2 mA?
2.15.05	HMI: Increase manual setting to 100%. Technician: Is the signal at the valve 20.0 ± 0.2 mA?
2.15.06	HMI: Decrease manual setting to 0%. Technician: Is the signal at the valve 4.0 ± 0.2 mA?
2.15.07	Technician: Land 4 - 20 mA signal leads on MOV_283W_009 Technician: Are the wires reconnected?
2.15.08	Test Director: Ensure the makeup water valve is set up according to manufacturers instructions Test Director: Does the makeup water valve appear to be functioning correctly?
Prep	HMI: Close the WEST MAKEUP WATER Faceplate.

Prep	HMI: Reminder - Verify HMI activities event log.

Passing Report

Section MAKEUPATP

LogDate	ID	Tester	Description
5/20/99 17:17:51	2.15.01	TLS	HMI: Is the 283W communication light blinking? [YES]
5/20/99 17:20:23	2.15.02	TLS	Technician: Are the wires connected? [YES]
5/20/99 17:20:28	2.15.03	TLS	HMI: Does the switch indicate MANUAL? [YES]
5/20/99 17:20:47	2.15.04	TLS	Technician: Is the signal at the valve 12.0 ± 0.2 mA? [YES]
5/20/99 17:21:02	2.15.05	TLS	Technician: Is the signal at the valve 20.0 ± 0.2 mA? [YES]
5/20/99 17:21:21	2.15.06	TLS	Technician: Is the signal at the valve 4.0 ± 0.2 mA? [YES]
5/20/99 17:21:54	2.15.07	TLS	Technician: Are the wires reconnected? [YES]

DynCorp Test Director	5/29/99 Date	FDNW Project Manager	5/29/99 Date
FDNW Test Director	~~5/20/99~~ 6/30/99 Date	Recorder - FDNW	6/30/99 Date
Authorized Inspector - FDH	5/20/99 Date	Witness	5/20/99 Date

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Exceptions Report

Section MAKEUPATP

LogDate	ID	Tester	RAA	EAA	O	Description
5/20/99 17:22:19	2.15.08	TLS	☐	☒	☐	Test Director: Does the makeup water valve appear to be functioning correctly?[No: non-functional]

#2.15.08 VALVE MOTOR PULSING SEVERELY. PLC OUTPUT NEEDS TO BE FILTERED, VALVE CALIBRATED
5/22/99
TLS

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DynCorp Test Director	5/29/99 Date	FDNW Project Manager	5/29/99 Date	FDNW Test Director	6/30/99 Date
Recorder - FDNW	6/30/99 Date	Authorized Inspector -FDH	5/20/99 Date	Witness	5/20/99 Date

5/20/99 17:25:21 17:25:21

HNF-4524 Rev. 0

2.16 Polymer Feed System ATP

2.16.01	HMI: Verify HMI is in communication with the 283W PLC. HMI: Is the 283W communication light blinking?
Prep	HMI: Go to POLYMER 1 Faceplate (Testing WY14, FIC_283W_001P1).
Prep	Technician: Go to POLYMER FEED SYSTEM 1
2.16.02	Technician: Disconnect 4 - 20 mA signal leads and connect to multimeter in 20 mA range Technician: Are the wires connected?
2.16.03	HMI: Select POLYMER FEED 1 - MANUAL HMI: Does the switch indicate MANUAL?
2.16.04	HMI: Increase manual setting to 50%. Technician: Is the signal at the pump 12.0 ± 0.2 mA?
2.16.05	HMI: Increase manual setting to 100%. Technician: Is the signal at the pump 20.0 ± 0.2 mA?
2.16.06	HMI: Decrease manual setting to 0%. Technician: Is the signal at the pump 4.0 ± 0.2 mA?
2.16.07	Technician: Reconnect 4 - 20 mA signal leads on POLYMER FEED SYSTEM 1 Technician: Are the wires reconnected?
Prep	HMI: Close the POLYMER FEED SYSTEM 1 Faceplate.
Prep	HMI: Go to POLYMER 2 Faceplate (Testing WY15, FIC_283W_001P2).

Prep	Technician: Go to POLYMER FEED SYSTEM 2
2.16.08	Technician: Disconnect 4 - 20 mA signal leads and connect to multimeter in 20 mA range Technician: Are the wires connected?
2.16.09	HMI: Select POLYMER FEED 2 - MANUAL HMI: Does the switch indicate MANUAL?
2.16.10	HMI: Increase manual setting to 50%. Technician: Is the signal at the pump 12.0 ± 0.2 mA?
2.16.11	HMI: Increase manual setting to 100%. Technician: Is the signal at the pump 20.0 ± 0.2 mA?
2.16.12	HMI: Decrease manual setting to 0%. Technician: Is the signal at the pump 4.0 ± 0.2 mA?
2.16.13	Technician: Reconnect 4 - 20 mA signal leads on POLYMER FEED SYSTEM 2 Technician: Are the wires reconnected?
Prep	HMI: Close the POLYMER 2 Faceplate and verify event log

Passing Report

Section POLYFEEDATP

LogDate	ID	Tester	Description
5/20/99 17:02:36	2.16.01	TLS	HMI: Is the 283W communication light blinking? [YES]
5/20/99 17:02:44	2.16.02	TLS	Technician: Are the wires connected? [YES]
5/20/99 17:02:47	2.16.03	TLS	HMI: Does the switch indicate MANUAL? [YES]
5/20/99 17:02:53	2.16.04	TLS	Technician: Is the signal at the pump 12.0 ± 0.2 mA? [YES]
5/20/99 17:03:00	2.16.05	TLS	Technician: Is the signal at the pump 20.0 ± 0.2 mA? [YES]
5/20/99 17:03:06	2.16.06	TLS	Technician: Is the signal at the pump 4.0 ± 0.2 mA? [YES]
5/20/99 17:03:29	2.16.07	TLS	Technician: Are the wires reconnected? [YES]
5/20/99 17:06:53	2.16.08	TLS	Technician: Are the wires connected? [YES]
5/20/99 17:07:00	2.16.09	TLS	HMI: Does the switch indicate MANUAL? [YES]
5/20/99 17:15:21	2.16.13	TLS	Technician: Are the wires reconnected? [YES]

DynCorp Test Director	Date 5/29/99	FDNW Project Manager	Date 5/29/99
FDNW Test Director	Date 5/20/99	Recorder - FDNW	Date 6/30/99
Authorized Inspector - FDH	Date 5/20/99	Witness	Date 6/30/99

5/20/99 17:24:54 17:24:54

Exceptions Report

Section POLYFEEDATP

LogDate	ID	Tester	RAA	EAA	O	Description
5/20/99 17:11:11	2.16.10	TLS	☒	☐	☐	Technician: Is the signal at the pump 12.0 ± 0.2 mA?[No: reads 3.5 mA]
5/20/99 17:11:51	2.16.11	TLS	☒	☐	☐	Technician: Is the signal at the pump 20.0 ± 0.2 mA?[No: no change - 3.5 mA]
5/20/99 17:14:34	2.16.12	TLS	☒	☐	☐	Technician: Is the signal at the pump 4.0 ± 0.2 mA?[No: 3.5 mA]

2.16.10
" .11
" .12

CONTROL SWITCHES @ PUMPS WERE NOT PROPERLY POSITIONED DURING TEST. DURING TROUBLESHOOTING EFFORTS, SWITCHES WERE REPOSITIONED & ABOVE TESTS WERE DONE SATISFACTORY & ACCEPTED

Thomas Sweet
1/4/00

Thomas Sweet	5/29/99	Brian C Hamm	5/29/99	S J Romer	6/30/99
DynCorp Test Director	Date	FDNW Project Manager	Date	FDNW Test Director	Date
Will Thomas	6/30/99	Ryan Dyl	5/20/99	Witness	6/30/99
Recorder - FDNW	Date	Authorized Inspector -FDH	Date		Date
5/20/99 17:24:50	17:24:50				

2.17 FILTER WASTEWATER AND FRP ATP

Prep	HMI: Go to the WEST FILTER WASTEWATER screen
Prep	Technician: Go to FWW solid waste transmitter (FIT_283WB_004) and lift plus and minus leads
2.17.01	HMI: Verify HMI is in communication with the 283W PLC. HMI: Is the 283W communication light blinking?
2.17.02	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the FWW flow 0 gpm ± 1%?
2.17.03	Technician: Reset the simulator to 20 mA. HMI: Is the FWW flow 250 gpm ± 1%?
2.17.04	Technician: Land the wires back on the plus and minus terminals. Technician: Are the wires reconnected?
2.17.05	Technician: Go to POLYMER FEED SYSTEM 3, lift (+) and (-) leads, and connect to multimeter in 20 mA range Technician: Are the wires connected to the multimeter?
2.17.06	HMI: Set the Flow = 0 %. Technician: Is the PLC output signal 4 mA?
2.17.07	HMI: Set the Flow = 100 %. Technician: Is the PLC output signal 20 mA?
2.17.08	Technician: Land the wires back on the (+) and (-) terminals Technician: Are the wires reconnected?
Prep	Technician: Go to MCB

2.17.09	Technician: Lift lead from field side of terminal TB8-42 and apply jumper to terminals TB8-42 and TB8-43 HMI: Does the FWW Equalization Basin Level "HIGH HIGH" alarm activate?
2.17.10	Technician: Remove the jumper HMI: Does the FWW Equalization Basin Level "HIGH HIGH" alarm return to normal?
2.17.11	Technician: Land the wire back on terminal TB8-42 Technician: Is the wire reconnected?
2.17.12	Technician: Lift lead from field side of terminal TB8-44 and apply jumper to terminals TB8-44 and TB8-45 HMI: Does the FWW Equalization Basin Level "LOW LOW" alarm activate?
2.17.13	Technician: Remove the jumper HMI: Does the FWW Equalization Basin Level "LOW LOW" alarm return to normal?
2.17.14	Technician: Land the wire back on terminal TB8-44 Technician: Is the wire reconnected?
2.17.15	Technician: Lift lead from field side of terminal TB8-38 and apply jumper to terminals TB8-38 and TB8-39 HMI: Does the FWW Equalization Basin Pressure "HIGH" alarm activate?
2.17.16	Technician: Remove the jumper HMI: Does the FWW Equalization Basin Pressure "HIGH" alarm return to normal?
2.17.17	Technician: Land the wire back on terminal TB8-38 Technician: Is the wire reconnected?
2.17.18	Technician: Lift lead from field side of terminal TB8-46 and apply jumper to terminals TB8-46 and TB8-47 HMI: Does the Recycle Pumping Station Level "HIGH HIGH" alarm activate?
2.17.19	Technician: Remove the jumper HMI: Does the Recycle Pumping Station Level "HIGH HIGH" alarm return to normal?

2.17.20	Technician: Land the wire back on terminal TB8-46 Technician: Is the wire reconnected?
2.17.21	Technician: Lift lead from field side of terminal TB8-48 and apply jumper to terminals TB8-48 and TB8-49 HMI: Does the Recycle Pumping Station Level "LOW LOW" alarm activate?
2.17.22	Technician: Remove the jumper HMI: Does the Recycle Pumping Station Level "LOW LOW" alarm return to normal?
2.17.23	Technician: Land the wire back on terminal TB8-48 Technician: Is the wire reconnected?
2.17.24	Technician: Lift lead from field side of terminal TB8-40 and apply jumper to terminals TB8-40 and TB8-41 HMI: Does the Recycle Pumping Station Pressure "HIGH" alarm activate?
2.17.25	Technician: Remove the jumper HMI: Does the Recycle Pumping Station Pressure "HIGH" alarm return to normal?
2.17.26	Technician: Land the wire back on terminal TB8-40 Technician: Is the wire reconnected?
Prep	HMI: Go to CURRENT ALARMS
2.17.27	Technician: Lift lead from field side of terminal TB3A-6 and apply jumper to terminals TB3A-6 and TB3B-6 HMI: Does the indicator light for the 283WF FRP Manhole No. 4 Level "HIGH" activate?
2.17.28	Technician: Remove the jumper HMI: Does the indicator light for the 283WF FRP Manhole No. 4 Level "HIGH" return to normal?
2.17.29	Technician: Land the wire back on terminal TB3A-6 Technician: Is the wire reconnected?

2.17.30	Technician: Lift lead from field side of terminal TB3A-12 and apply jumper to terminals TB3A-12 and TB3B-12 HMI: Does the indicator light for the 283WF FRP Manhole No. 4 pH "HIGH" activate?
2.17.31	Technician: Remove the jumper HMI: Does the indicator light for the 283WF FRP Manhole No. 4 pH "HIGH" return to normal?
2.17.32	Technician: Land the wire back on terminal TB3A-12 Technician: Is the wire reconnected?
2.17.33	Technician: Lift lead from field side of terminal TB3A-11 and apply jumper to terminals TB3A-11 and TB3B-11 HMI: Does the indicator light for the 283WF FRP Manhole No. 4 pH "LOW" activate?
2.17.34	Technician: Remove the jumper HMI: Does the indicator light for the 283WF FRP Manhole No. 4 pH "LOW" return to normal?
2.17.35	Technician: Land the wire back on terminal TB3A-11 Technician: Is the wire reconnected?
2.17.36	Technician: Lift lead from field side of terminal TB3A-18 and apply jumper to terminals TB3A-18 and TB3B-18 HMI: Does the indicator light for the 283WF FRP Manhole No. 4 Conductivity Sample "HIGH" activate?
2.17.37	Technician: Remove the jumper HMI: Does the indicator light for the 283WF FRP Manhole No. 4 Conductivity Sample "HIGH" return to normal?
2.17.38	Technician: Land the wire back on terminal TB3A-18 Technician: Is the wire reconnected?
2.17.39	Technician: Lift lead from field side of terminal TB3A-24 and apply jumper to terminals TB3A-24 and TB3B-24 HMI: Does the indicator light for the 283WF FRP Manhole No. 4 Temperature "HIGH" activate?

2.17.40	Technician: Remove the jumper HMI: Does the indicator light for the 283WF FRP Manhole No. 4 Temperature "HIGH" return to normal?
2.17.41	Technician: Land the wire back on terminal TB3A-24 Technician: Is the wire reconnected?
Prep	Technician: Land necessary leads and fuses to activate the 283W PLC cabinet ALARM HORN
2.17.42	Operator: Activate the 283W SEWER SUMP HI ALARM (float) HMI: Did the SEWER_283W_HIA alarm activate? Did the 283W PLC cabinet alarm horn sound?
2.17.43	Operator: Return the SEWER SUMP FLOAT to its normal position HMI: Did the SEWER_283W_HIA alarm return to normal? Did the alarm horn continue to sound?
2.17.44	HMI: Acknowledge all alarms Did the alarm horn stop?
Prep	Operator: Go to 283WB EQU PUMPING STATION
2.17.45	Operator: START pump #1 HMI: Does the indicator light for the FWW Equalization Basin Pump 1 RUNNING activate?
2.17.46	Operator: STOP pump #1 HMI: Does the indicator light for the FWW Equalization Basin Pump 1 RUNNING clear?
2.17.47	Operator: START pump #2 HMI: Does the indicator light for the FWW Equalization Basin Pump 2 RUNNING activate?

2.17.48	Operator: STOP pump #2 HMI: Does the indicator light for the FWW Equalization Basin Pump 2 RUNNING clear?
2.17.49	Operator: START pump #3 HMI: Does the indicator light for the FWW Equalization Basin Pump 3 RUNNING activate?
2.17.50	Operator: STOP pump #3 HMI: Does the indicator light for the FWW Equalization Basin Pump 3 RUNNING clear?
Prep	Operator: Go to 283WD RECYCLE PUMPING STATION
2.17.51	Operator: START pump #1 HMI: Does the indicator light for the FWW Recycle Pumping Station Pump 1 RUNNING activate?
2.17.52	Operator: STOP pump #1 HMI: Does the indicator light for the FWW Recycle Pumping Station Pump 1 RUNNING clear?
2.17.53	Operator: START pump #2 HMI: Does the indicator light for the FWW Recycle Pumping Station Pump 2 RUNNING activate?
2.17.54	Operator: STOP pump #2 HMI: Does the indicator light for the FWW Recycle Pumping Station Pump 2 RUNNING clear?
2.17.55	Operator: START pump #3 HMI: Does the indicator light for the FWW Recycle Pumping Station Pump 3 RUNNING activate?
2.17.56	Operator: STOP pump #3 HMI: Does the indicator light for the FWW Recycle Pumping Station Pump 3 RUNNING clear?

2.17.57	Operator: Ensure the SOLIDS CONTACT CLARIFIER is OFFLINE HMI: Does the FILTER WASTEWATER screen indicate SOLIDS CONTACT CLARIFIER OFF?
2.17.58	Operator: Activate the SOLIDS CONTACT CLARIFIER HMI: Does the FILTER WASTEWATER screen indicate SOLIDS CONTACT CLARIFIER ON?
Prep	Operator: Return the SOLIDS CONTACT CLARIFIER to its pre-test state
Prep	Verify HMI activities on the event log

Passing Report

Section FWW_FRP_ATP

LogDate	ID	Tester	Description
5/20/99 15:59:32	2.17.01	TLS	HMI: Is the 283W communication light blinking? [YES]
5/20/99 16:00:48	2.17.02	TLS	HMI: Is the FWW flow 0 gpm ± 1%? [YES]
5/20/99 16:01:06	2.17.03	TLS	HMI: Is the FWW flow 250 gpm ± 1%? [YES]
5/20/99 16:02:34	2.17.04	TLS	Technician: Are the wires reconnected? [YES]
5/20/99 16:09:22	2.17.05	TLS	Technician: Are the wires connected to the multimeter? [YES]
5/20/99 16:09:40	2.17.06	TLS	Technician: Is the PLC output signal 4 mA? [YES]
5/20/99 16:10:25	2.17.07	TLS	Technician: Is the PLC output signal 20 mA? [YES]
5/20/99 16:13:30	2.17.08	TLS	Technician: Are the wires reconnected? [YES]
5/20/99 16:15:04	2.17.09	TLS	HMI: Does the FWW Equalization Basin Level "HIGH HIGH" alarm activate? [YES]
5/20/99 16:15:43	2.17.10	TLS	HMI: Does the FWW Equalization Basin Level "HIGH HIGH" alarm return to normal? [YES]
5/20/99 16:15:47	2.17.11	TLS	Technician: Is the wire reconnected? [YES]
5/20/99 16:17:29	2.17.12	TLS	HMI: Does the FWW Equalization Basin Level "LOW LOW" alarm activate? [YES]
5/20/99 16:17:37	2.17.13	TLS	HMI: Does the FWW Equalization Basin Level "LOW LOW" alarm return to normal? [YES]
5/20/99 16:17:55	2.17.14	TLS	Technician: Is the wire reconnected? [YES]
5/20/99 16:18:38	2.17.15	TLS	HMI: Does the FWW Equalization Basin Pressure "HIGH" alarm activate? [YES]
5/20/99 16:18:46	2.17.16	TLS	HMI: Does the FWW Equalization Basin Pressure "HIGH" alarm return to normal? [YES]
5/20/99 16:18:58	2.17.17	TLS	Technician: Is the wire reconnected? [YES]
5/20/99 16:19:45	2.17.18	TLS	HMI: Does the Recycle Pumping Station Level "HIGH HIGH" alarm activate? [YES]

DynCorp Test Director	Date 5/29/99	FDNW Project Manager	Date 5/29/99
SJ Remand 6/30/99 FDNW Test Director	Date 5/20/99	Recorder - FDNW	Date 6/30/99
Authorized Inspector - FDH	Date 5/20/99	Witness	Date 5/20/99

5/20/99 16:19:49	2.17.19	TLS	HMI: Does the Recycle Pumping Station Level "HIGH HIGH" alarm return to normal? [YES]
5/20/99 16:20:03	2.17.20	TLS	Technician: Is the wire reconnected? [YES]
5/20/99 16:21:15	2.17.21	TLS	HMI: Does the Recycle Pumping Station Level "LOW LOW" alarm activate? [YES]
5/20/99 16:21:24	2.17.22	TLS	HMI: Does the Recycle Pumping Station Level "LOW LOW" alarm return to normal? [YES]
5/20/99 16:21:37	2.17.23	TLS	Technician: Is the wire reconnected? [YES]
5/20/99 16:22:02	2.17.24	TLS	HMI: Does the Recycle Pumping Station Pressure "HIGH" alarm activate? [YES]
5/20/99 16:27:31	2.17.25	TLS	HMI: Does the Recycle Pumping Station Pressure "HIGH" alarm return to normal? [YES]
5/20/99 16:27:43	2.17.26	TLS	Technician: Is the wire reconnected? [YES]
* 5/20/99 16:29:50	2.17.28	TLS	HMI: Does the indicator light for the 283WF FRP Manhole No. 4 Level "HIGH" return to norma [YES]
5/20/99 16:29:58	2.17.29	TLS	Technician: Is the wire reconnected? [YES]
* 5/20/99 16:31:01	2.17.31	TLS	HMI: Does the indicator light for the 283WF FRP Manhole No. 4 pH "HIGH" return to normal? [YES]
5/20/99 16:31:05	2.17.32	TLS	Technician: Is the wire reconnected? [YES]
* 5/20/99 16:31:53	2.17.34	TLS	HMI: Does the indicator light for the 283WF FRP Manhole No. 4 pH "LOW" return to normal? [YES]
5/20/99 16:32:05	2.17.35	TLS	Technician: Is the wire reconnected? [YES]
* 5/20/99 16:33:05	2.17.37	TLS	HMI: Does the indicator light for the 283WF FRP Manhole No. 4 Conductivity Sample "HIGH" r [YES]
5/20/99 16:33:09	2.17.38	TLS	Technician: Is the wire reconnected? [YES]
* 5/20/99 16:33:47	2.17.39	TLS	HMI: Does the indicator light for the 283WF FRP Manhole No. 4 Temperature "HIGH" activate? [YES]
* 5/20/99 16:34:03	2.17.40	TLS	HMI: Does the indicator light for the 283WF FRP Manhole No. 4 Temperature "HIGH" return to [YES]
5/20/99 16:34:09	2.17.41	TLS	Technician: Is the wire reconnected? [YES]
5/20/99 16:36:20	2.17.42	TLS	HMI: Did the SEWER_283W_HIA alarm activate? Did the 283W PLC cabinet alarm horn sound? [YES]
5/20/99 16:36:29	2.17.43	TLS	HMI: Did the SEWER_283W_HIA alarm return to normal? Did the alarm horn continue to sound? [YES]

Thomas Smith	5/27/99	Brian C. Hanson	5/29/99
DynCorp Test Director	Date	FDNW Project Manager	Date
SJ Romero 6/30/99 Chris Shell	5/20/99	Will Thom	6/30/99
FDNW Test Director	Date	Recorder - FDNW	Date
[illegible]	5/20/99	[illegible]	5/20/99
Authorized Inspector - FDH	Date	Witness	Date

* Should be listed as exceptions. [illegible] 5/20/1999

5/20/99 16:36:56	2.17.44	TLS	Did the alarm horn stop? [YES]
5/20/99 16:38:03	2.17.45	TLS	HMI: Does the indicator light for the FWW Equalization Basin Pump 1 RUNNING activate? [YES]
5/20/99 16:38:11	2.17.46	TLS	HMI: Does the indicator light for the FWW Equalization Basin Pump 1 RUNNING clear? [YES]
5/20/99 16:38:20	2.17.47	TLS	HMI: Does the indicator light for the FWW Equalization Basin Pump 2 RUNNING activate? [YES]
5/20/99 16:38:28	2.17.48	TLS	HMI: Does the indicator light for the FWW Equalization Basin Pump 2 RUNNING clear? [YES]
5/20/99 16:38:35	2.17.49	TLS	HMI: Does the indicator light for the FWW Equalization Basin Pump 3 RUNNING activate? [YES]
5/20/99 16:38:45	2.17.50	TLS	HMI: Does the indicator light for the FWW Equalization Basin Pump 3 RUNNING clear? [YES]
5/20/99 16:39:50	2.17.51	TLS	HMI: Does the indicator light for the FWW Recycle Pumping Station Pump 1 RUNNING activate? [YES]
5/20/99 16:40:00	2.17.52	TLS	HMI: Does the indicator light for the FWW Recycle Pumping Station Pump 1 RUNNING clear? [YES]
5/20/99 16:40:53	2.17.55	TLS	HMI: Does the indicator light for the FWW Recycle Pumping Station Pump 3 RUNNING activate? [YES]
5/20/99 16:41:06	2.17.56	TLS	HMI: Does the indicator light for the FWW Recycle Pumping Station Pump 3 RUNNING clear? [YES]
5/20/99 16:41:49	2.17.57	TLS	HMI: Does the FILTER WASTEWATER screen indicate SOLIDS CONTACT CLARIFIER OFF? [YES]
5/20/99 16:42:07	2.17.58	TLS	HMI: Does the FILTER WASTEWATER screen indicate SOLIDS CONTACT CLARIFIER ON? [YES]

DynCorp Test Director	5/29/99 Date	FDNW Project Manager	5/29/99 Date
SS Romero 6/30/99 FDNW Test Director	5/20/99 Date	Recorder - FDNW	6/30/99 Date
Authorized Inspector - FDH	5/20/99 Date	Witness	5/20/99 Date

Exceptions Report

Section FWW_FRP_ATP

LogDate	ID	Tester	RAA	EAA	O	Description
5/20/99 16:29:35	2.17.27	TLS	X	☐	☐	HMI: Does the indicator light for the 283WF FRP Manhole No. 4 Level "HIGH" activate?[No: no indicat
5/20/99 16:30:46	2.17.30	TLS	X	☐	☐	HMI: Does the indicator light for the 283WF FRP Manhole No. 4 pH "HIGH" activate?[No: no indicator
5/20/99 16:31:46	2.17.33	TLS	X	☐	☐	HMI: Does the indicator light for the 283WF FRP Manhole No. 4 pH "LOW" activate?[No: no indicator -
5/20/99 16:32:56	2.17.36	TLS	X	☐	☐	HMI: Does the indicator light for the 283WF FRP Manhole No. 4 Co[No: no indicator - on CURR ALARMS]
5/20/99 16:40:21	2.17.53	TLS	X	☐	☐	HMI: Does the indicator light for the FWW Recycle Pumping Station Pump 2 RUNNING activate?[No: unab
5/20/99 16:40:41	2.17.54	TLS	X	☐	☐	HMI: Does the indicator light for the FWW Recycle Pumping Station Pump 2 RUNNING clear?[No: was not

* See passing report for additional exceptions 5/20/1999

2.17.28
2.17.31
2.17.34
2.17.37
2.17.39
2.17.40
*

ALL EXCEPTIONS CLEARED AFTER TROUBLESHOOTING PANEL WIRING & PLC PROGRAMING. FOUND WIRING PROBLEMS & N.O. VERSUS N.C. PROGRAMING

Thomas Swart 1/4/00

Thomas Swart	5/21/99	Brian C Hanson	5/29/99	S J Romero	6/30/99
DynCorp Test Director	Date	FDNW Project Manager	Date	FDNW Test Director	Date
Will Thomas	6/30/99	Ryan Dyl	5/20/99	Bob Nguyen	6/30/99
Recorder - FDNW	Date	Authorized Inspector -FDH	Date	Witness	Date

5/20/99 16:47:21 16:47:21 Page 1 of 1

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HNF-4524 Rev. 0

2.18 WW Filter System Instrumentation/Controls 283WD ATP

2.18.01	HMI: Verify HMI is in communication with the 283W PLC. HMI: Is the 283W communication light blinking?
Prep	HMI: Go to the WEST FWW Faceplate.
Prep	HMI: DWG H-2-829270 SH 17 (Ref. for the next steps).
Prep	Technician: Go to the MCB.
2.18.02	Technician: Lift the wire from terminal TB3A-4 (TB2-29) (X11) (PAH_283WB_001). HMI: Does the FWW Recycle Pumping Station Pressure "HIGH" alarm activate?
Prep	HMI: ACK the FWW Recycle Pumping Station Pressure "HIGH" alarm.
2.18.03	Technician: Land the wire back on terminal TB3A-4 (TB2-29). HMI: Does the FWW Recycle Pumping Station Pressure "HIGH" alarm clear?
2.18.04	Technician: Lift the wire from terminal TB7-33 (TB2-30) (X12) (YL_283WB_001). HMI: Does the indicator light for the FWW Recycle Pumping Station Pump 1 RUNNING activate?
2.18.05	Technician: Land the wire back on terminal TB7-33 (TB2-30). HMI: Does the indicator light for the FWW Recycle Pumping Station Pump 1 RUNNING clear?
2.18.06	Technician: Lift the wire from terminal TB7-35 (TB2-31) (X13) (YL_283WB_002). HMI: Does the indicator light for the FWW Recycle Pumping Station Pump 2 RUNNING activate?

MOVED TO 2.17 5/20 TLS

2.18.07	Technician: Land the wire back on terminal TB7-35 (TB2-31). HMI: Does the indicator light for the FWW Recycle Pumping Station Pump 2 RUNNING clear?
2.18.08	Technician: Lift the wire from terminal TB7-37 (TB2-32) (X14) (YL_283WB_003). HMI: Does the indicator light for the FWW Recycle Pumping Station Pump 3 RUNNING activate?
2.18.09	Technician: Land the wire back on terminal TB7-37 (TB2-32). HMI: Does the indicator light for the FWW Recycle Pumping Station Pump 3 RUNNING clear?
2.18.10	Technician: Lift the wire from terminal TB3A-10 (TB2-27) (X9) (LAHH_283WB_005). HMI: Does the indicator light for the FWW Recycle Pumping Station Level "HIGH" activate?
Prep	HMI: ACK the indicator light for the FWW Recycle Pumping Station Level "HIGH".
2.18.11	Technician: Land the wire back on terminal TB3A-10 (TB2-27). HMI: Does the indicator light for the FWW Recycle Pumping Station Level "HIGH" clear?
2.18.12	Technician: Lift the wire from terminal TB3A-14 (TB2-28) (X10) (LALL_283WB_005). HMI: Does the indicator light for the FWW Recycle Pumping Station Level "LOW" activate?
Prep	HMI: ACK the indicator light for the FWW Recycle Pumping Station Level "LOW".
2.18.13	Technician: Land the wire back on terminal TB3A-14 (TB2-28). HMI: Does the indicator light for the FWW Recycle Pumping Station Level "LOW" clear?
Prep	HMI: Close the WEST FWW Faceplate and verify the HMI activities on the event log .

2.19 WW FRP System Instrumentation/Controls 283WF ATP

2.19.01	HMI: Verify HMI is in communication with the 283W PLC. HMI: Is the 283W communication light blinking?
Prep	HMI: Go to the Filter Waste Water Faceplate.
Prep	Technician: Go to the FRP Manhole No. 4 Level Transmitter (LIT_283W_004).
Prep	HMI: DWG H-2-829270 SH 20 (Ref. for the next steps).
2.19.02	Technician: Lift the wire from terminal D (NO of relay 4) (TB3A-6) (X15) (LAHH_283WB_004). HMI: Does the indicator light for the 284W FRP Manhole No. 4 Level "HIGH" activate?
Prep	HMI: ACK the indicator light for the 284W FRP Manhole No. 4 Level "HIGH".
2.19.03	Technician: Land the wire back on terminal D (NO of relay 4) (TB3A-6). HMI: Does the indicator light for the 284W FRP Manhole No. 4 Level "HIGH" clear?
Prep	Technician: Go to the MCB.
2.19.04	Technician: Lift the wire from terminal TB3A-12 (TB2-15) (X16) (AAH_283WB_006). HMI: Does the indicator light for the 284W FRP Manhole No. 4 pH "HIGH" activate?
Prep	HMI: ACK the indicator light for the 284W FRP Manhole No. 4 pH "HIGH".
2.19.05	Technician: Land the wire back on terminal TB3A-12 (TB2-15). HMI: Does the indicator light for the 284W FRP Manhole No. 4 pH "HIGH" clear?

MOVED TO 2.17 5/20 TLS

2.19.06	Technician: Lift the wire from terminal TB3B-12 (TB2-15A) (X17) (AAL_283WB_006). HMI: Does the indicator light for the 284W FRP Manhole No. 4 pH "LOW" activate?
Prep	HMI: ACK the indicator light for the 284W FRP Manhole No. 4 pH "LOW".
2.19.07	Technician: Land the wire back on terminal TB3B-12 (TB2-15A). HMI: Does the indicator light for the 284W FRP Manhole No. 4 pH "LOW" clear?
2.19.08	Technician: Lift the wire from terminal TB3A-18 (TB2-14) (X18) (AAH_283WB_008). HMI: Does the indicator light for the 284W FRP Manhole No. 4 Conductivity Sample "HIGH" activate?
Prep	HMI: ACK the indicator light for the 284W FRP Manhole No. 4 Conductivity Sample "HIGH".
2.19.09	Technician: Land the wire back on terminal TB3A-18 (TB2-14). HMI: Does the indicator light for the 284W FRP Manhole No. 4 Conductivity Sample "HIGH" clear?
2.19.10	Technician: Lift the wire from terminal TB3A-24 (TB2-17) (X19) (TAH_283WB_008). HMI: Does the indicator light for the 284W FRP Manhole No. 4 Conductivity Sample "HIGH" activate?
Prep	HMI: ACK the indicator light for the 284W FRP Manhole No. 4 Conductivity Sample "HIGH".
2.19.11	Technician: Land the wire back on terminal TB3A-24 (TB2-17). HMI: Does the indicator light for the 284W FRP Manhole No. 4 Conductivity Sample "HIGH" clear?
Prep	HMI: Close the WEST Filter Waste Water Faceplate and verify the HMI activities on the event log. Temp Alarm

3.0 B604 West ATP

3.01	HMI: Verify HMIs are in communication with the 283W and 282WC PLCs. HMI New: Are the 283W and 282WC communication lights blinking?
Prep	HMI New: Go to the WEST FIRE/RAW WATER SYSTEMS Screen.
Prep	HMI Old: Go to the RAW WATER STATUS Screen.
3.02	HMI Old & New: Compare the value for the RW Reservoir Fill Valve Position. HMI Old & New: Are the values within ± 1%?
3.03	HMI Old & New: Compare the value for the Export Water Pressure. HMI Old & New: Are the values within ± 1%?
3.04	HMI Old & New: Compare the value for the Booster Pump # 1 Speed. HMI Old & New: Are the values within ± 1%?
3.05	HMI Old & New: Compare the value for the Booster Pump # 2 Speed. HMI Old & New: Are the values within ± 1%?
3.06	HMI Old & New: Compare the value for the Raw Water Reservoir Level Setpoint. HMI Old & New: Are the values within ± 1%?
3.07	HMI New: Change the Raw Water Reservoir Level Setpoint by a minimum of 20%. HMI Old & New: Are the values within ± 1%?
3.08	HMI New: Reset the Raw Water Reservoir Level Setpoint back to original value. HMI Old & New: Are the values within ± 1%?
3.09	HMI Old & New: Compare the status for the RW Pressure. HMI Old & New: Are the values within ± 1%?

3.10	HMI Old & New: Compare the status for the RW Pressure Setpoint. HMI Old & New: Are the values within ± 1%?
3.11	HMI Old & New: Compare the value for the Raw Water Flow. HMI Old & New: Are the values within ± 1%?
Prep	HMI New: Go to the WEST FIRE/RAW WATER SYSTEMS Screen.
Prep	HMI Old: Go to the SANITARY WATER SYSTEM STATUS Screen.
3.12	HMI Old & New: Compare the value for the Temperature Control Valve Position. HMI Old & New: Are the values within ± 1%?
3.13	HMI Old & New: Compare the value for the 2" Fill Valve Position. HMI Old & New: Are the values within ± 1%?
3.14	HMI Old & New: Compare the value for the 4" Fill Valve Position. HMI Old & New: Are the values within ± 1%?
3.15	HMI Old & New: Compare the value for the Sanitary Water Pressure. HMI Old & New: Are the values within ± 1%?
3.16	HMI Old & New: Compare the value for the SW Reservoir Level. HMI Old & New: Are the values within ± 1%?
3.17	Operator: Cycle the RW Jockey Pump. HMI Old & New: Do the indications correctly track the cycling of the pump?
3.18	Operator: Cycle the SW Jockey Pump. HMI Old & New: Do the indications correctly track the cycling of the pump?
3.19	Operator: Cycle ESW Fire Pump. HMI Old & New: Do the indications correctly track the cycling of the pump?

3.20	Operator: Cycle ERW Fire Pump. HMI Old & New: Do the indications correctly track the cycling of the pump?
Prep	HMI Old: Go to the SYSTEM CONTROL Screen.
Prep	HMI New: Go to the WEST SW RES LVL Faceplate.
3.21	HMI New: Adjust the Setpoint for the SW Reservoir Level. HMI Old & New: Are the values within ± 1%?
3.22	HMI New: Return the Setpoint for the SW Reservoir Level to the orginal setting. HMI Old & New: Is the value back at the orginal setting?
3.23	HMI Old & New: Compare the operational mode for the 2" and 4" Fill Valves. HMI Old & New: Is the mode indication the same (Auto/Manual)?
3.24	HMI New: Set the 2" Fill Valve to MANUAL HMI Old & New: Is the status indication the same?
3.25	HMI New: Increase the 2" Fill Valve by 10%. HMI Old & New: Is the status indication the same?
3.26	HMI New: Decrease the 2" Fill Valve back to original position. HMI Old & New: Is the status indication the same?
3.27	HMI New: Set the 4" Fill Valve to MANUAL HMI Old & New: Is the status indication the same?
3.28	HMI New: Increase the 4" Fill Valve by 10%. HMI Old & New: Is the status indication the same?
3.29	HMI New: Decrease the 4" Fill Valve back to original position. HMI Old & New: Is the status indication the same?

Prep	HMI New: Go to the WEST SW TEMP CTRL Faceplate.
3.30	HMI New: Adjust the Setpoint for the SW Reservoir Temperature. HMI Old & New: Are the values within ± 1%?
3.31	HMI New: Return the Setpoint for the Temperature to the orginal setting. HMI Old & New: Is the value back at the orginal setting?
3.32	HMI Old & New: Compare the operational mode for the SW Reservoir Steam Valve (Temp Control Valve). HMI Old & New: Is the mode indication the same (Auto/Manual)?
3.33	HMI New: Set the Temperature Control Valve to MANUAL HMI Old & New: Is the status indication the same?
3.34	HMI New: Increase the Temperature Control Valve by 10%. HMI Old & New: Is the status indication the same?
3.35	HMI New: Decrease the Temperature Control Valve back to original position. HMI Old & New: Is the status indication the same?
3.36	HMI Old & New: Compare the value for the SW Reservoir Temperature. HMI Old & New: Are the values within ± 1%?
Prep	HMI New: Go to the WEST ERW RES FILL Faceplate.
3.37	HMI New: Adjust the Setpoint for the ERW Reservoir Level. HMI Old & New: Are the values within ± 1%?
3.38	HMI New: Return the Setpoint for the ERW Reservoir Level to the orginal setting. HMI Old & New: Is the value back at the orginal setting?

3.39	HMI Old & New: Compare the operational mode for the RW Reservoir Fill Valve. HMI Old & New: Is the mode indication the same (Auto/Manual)?
3.40	HMI New: Set the RW Reservoir Fill Valve to MANUAL HMI Old & New: Is the status indication the same?
3.41	HMI New: Increase the RW Reservoir Fill Valve to 10%. HMI Old & New: Is the status indication the same?
3.42	HMI New: Decrease the RW Reservoir Fill Valve back to 0%. HMI Old & New: Is the status indication the same?
Prep	HMI New: Go to the WEST RW BSTR PUMPS Faceplate.
Prep	Operator: Prepare to Cycle/Run both RW Booster Pumps.
3.43	HMI New: Adjust the Setpoint for the RW Pressure. HMI Old & New: Are the values within ± 1%?
3.44	HMI New: Return the Setpoint for the RW Pressure to the orginal setting. HMI Old & New: Is the value back at the orginal setting?
3.45	HMI Old & New: Compare the Lead Pump selected. HMI Old & New: Is the lead pump indication the same?
3.46	HMI Old: Set Booster Pump 1 to MN. HMI New: Is the Pump 1 Start indication on?
3.47	HMI Old: Set Booster Pump 1 to OFF and Booster Pump 2 to MN (Run at minimum speed). HMI New: Is the Pump 1 Start indication off and the Pump 2 Start indication on?

3.48	HMI Old: Reset Both Booster Pumps 1 & 2 to OFF and set BSTR Pump Mode Control to AUTO. HMI New: Is the Speed Control indicator pointing to AUTO?	
3.49	HMI Old: Reset Both Booster Pumps 1 & 2 to AUTO (Run at minimum speed). HMI New: Is the Start Both Pumps Runtime Leveling Enabled indiciation on?	
Prep	HMI Old: Reset BSTR Pump Mode Control to MANUAL and Booster Pumps to OFF.	
3.50	HMI New: Click on the Pump 1 - Lead Select button. HMI Old: Is the indication for Lead Pump Select on for Booster #1.	
3.51	HMI New: Click on the Pump 2 - Lead Select button. HMI Old: Is the indication for Lead Pump Select on for Booster #2.	
Prep	HMI Old & New: Reset Booster Pump settings to original conditions.	
3.52	HMI New: Set Booster Pump #1 to MANUAL HMI Old & New: Is the status indication the same?	
3.53	HMI New: Start Booster Pump #1 and run to 10%. HMI Old & New: Is the status indication the same?	
3.54	HMI New: Run Booster Pump #1 back to 0% ~~to stop pump.~~ HMI Old & New: Is the status indication the same?	0% DOES NOT STOP PUMP, IT SETS IT TO 40% RUN SPEED AS IT SHOULD. TLS
3.55	HMI New: Set Booster Pump #1 to OFF. HMI Old & New: Is the status indication the same?	
3.56	HMI New: Set Booster Pump #2 to MANUAL HMI Old & New: Is the status indication the same?	

3.57	HMI New: Start Booster Pump #2 and run to 10%. HMI Old & New: Is the status indication the same?
3.58	HMI New: Run Booster Pump #2 back to 0% ~~to stop pump.~~ SEE # 3.54 TLS HMI Old & New: Is the status indication the same?
3.59	HMI New: Set Booster Pump #2 to OFF. HMI Old & New: Is the status indication the same?
Prep	HMI Old: Go to the SYSTEM TUNING Screen.
Prep	HMI New: Go to the WEST RW BSTR PUMPS PID CTRL Faceplate.
3.60	HMI Old & New: Compare the Sample Period. HMI Old & New: Are the values (in sec.) within ± 1%?
3.61	HMI Old & New: Compare the Sample Size. HMI Old & New: Are the values within ± 1%?
3.62	HMI Old & New: Compare the various Control parameters. HMI Old & New: Are the values within ± 1%?
Prep	HMI New: Go to the WEST SW RES LVL PID CTRL Faceplate.
3.63	HMI Old & New: Compare the value for the SW Reservoir Level Setpoint. HMI Old & New: Are the values within ± 1%?
3.64	HMI Old & New: Compare the Signal Multiplier. HMI Old & New: Are the values within ± 1%?
3.65	HMI Old & New: Compare the Control Threshold. HMI Old & New: Are the values within ± 1%?

3.66	HMI Old & New: Compare the Increment Step. HMI Old & New: Are the values within ± 1%?
3.67	HMI Old & New: Compare the Decrement Step. HMI Old & New: Are the values within ± 1%?
Prep	HMI New: Go to the WEST ERW RES FILL PID CTRL Faceplate.
3.68	HMI Old & New: Compare the value for the Raw Water Reservoir Level. HMI Old & New: Are the values within ± 1%?
3.69	HMI Old & New: Compare the Signal Multiplier. HMI Old & New: Are the values within ± 1%?
3.70	HMI Old & New: Compare the Control Threshold. HMI Old & New: Are the values within ± 1%?
3.71	HMI Old & New: Compare the Increment Step. HMI Old & New: Are the values within ± 1%?
3.72	HMI Old & New: Compare the Decrement Step. HMI Old & New: Are the values within ± 1%?
Prep	HMI New: Go to the WEST SW TEMP CTRL PID CTRL Faceplate.
3.73	HMI Old & New: Compare the Signal Multiplier. HMI Old & New: Are the values within ± 1%?
3.74	HMI Old & New: Compare the Control Threshold. HMI Old & New: Are the values within ± 1%?
3.75	HMI Old & New: Compare the Increment Step. HMI Old & New: Are the values within ± 1%?

3.76	HMI Old & New: Compare the Decrement Step. HMI Old & New: Are the values within ± 1%?
Prep	HMI New: Go to the WEST FIRE PUMP SETTINGS Faceplate.
3.77	HMI Old & New: Compare the Fire Pump Start Delay. HMI Old & New: Are the values within ± 1%?
3.78	HMI Old & New: Compare the SW Fire Pump Start Setpoint. HMI Old & New: Are the values within ± 1%?
3.79	HMI Old & New: Compare the RW Fire Pump Start Setpoint. HMI Old & New: Are the values within ± 1%?
3.80	HMI New: Go to the ALARMS Screen.
3.81	Operator: Manually trigger the 282WC Low Temperature alarm. HMI New: Does the 282WC Low Temperature alarm activate?
Prep	HMI New: ACK all alarms.
3.82	Operator: Return 282WC Temperature intrumentation to original condition. HMI New: Does the 282WC Low Temperature alarm clear?
3.83	Operator: Manually trigger the 282W Sump High Level alarm. HMI New: Does the 282W Sump High Level alarm activate?
Prep	HMI New: ACK all alarms.
3.84	Operator: Return 282W Sump Level intrumentation to original condition. HMI New: Does the 282W Sump High Level alarm clear?

3.85	Operator: Manually trigger the 282WC Sump High Level alarm. HMI New: Does the 282WC Sump High Level alarm activate?
Prep	HMI New: ACK all alarms.
3.86	Operator: Return 282WC Sump Level intrumentation to original condition. HMI New: Does the 282WC Sump High Level alarm clear?
3.87	Operator: Manually trigger the 282WC SW Low Pressure alarm. HMI New: Does the 282WC SW Low Pressure alarm activate?
Prep	HMI New: ACK all alarms.
3.88	Operator: Return 282WC SW Pressure intrumentation to original condition. HMI New: Does the 282WC SW Low Pressure alarm clear?
3.89	Operator: Manually trigger the 282W RW Low Pressure alarm. HMI New: Does the 282W RW Low Pressure alarm activate?
Prep	HMI New: ACK all alarms.
3.90	Operator: Return 282W RW Low Pressure intrumentation to original condition. HMI New: Does the 282W RW Low Temperature alarm clear?
3.91	Lead Engineer: Remove the old HMI and communication card and relocate the new communication card. Lead Engineer: Has the old communications card been removed and the new communications card be relocated?
Prep	HMI: Close the HMI Faceplates and verify event log.

Passing Report

Section B604WestATP

LogDate	ID	Tester	Description
5/29/99 14:25:34	3.01	GSC	HMI New: Are the 283W and 282WC communication lights blinking? [YES]
5/29/99 14:26:22	3.02	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 14:26:30	3.03	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 14:26:41	3.04	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 14:26:48	3.05	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 14:27:13	3.06	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 14:27:45	3.07	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 14:27:59	3.08	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 14:28:17	3.09	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 14:28:35	3.10	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 14:28:44	3.11	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 14:30:56	3.12	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 14:31:06	3.13	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 14:31:16	3.14	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 14:31:31	3.15	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 14:31:43	3.16	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 14:39:47	3.21	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 14:40:04	3.22	GSC	HMI Old & New: Is the value back at the orginal setting? [YES]
5/29/99 14:40:24	3.23	GSC	HMI Old & New: Is the mode indication the same (Auto/Manual)? [YES]
5/29/99 14:40:36	3.24	GSC	HMI Old & New: Is the status indication the same? [YES]
5/29/99 14:40:58	3.25	GSC	HMI Old & New: Is the status indication the same? [YES]

DynCorp Test Director	5/29/99 Date	FDNW Project Manager	5/29/99 Date
FDNW Test Director	5/29/99 Date	Recorder - FDNW	5/29/99 Date
Authorized Inspector - FDH	5/29/99 Date	Witness	5/29/99 Date

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5/29/99 14:41:11	3.26	GSC	HMI Old & New: Is the status indication the same? [YES]
5/29/99 14:41:27	3.27	GSC	HMI Old & New: Is the status indication the same? [YES]
5/29/99 14:41:38	3.28	GSC	HMI Old & New: Is the status indication the same? [YES]
5/29/99 14:41:44	3.29	GSC	HMI Old & New: Is the status indication the same? [YES]
5/29/99 14:42:32	3.30	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 14:42:42	3.31	GSC	HMI Old & New: Is the value back at the orginal setting? [YES]
5/29/99 14:42:58	3.32	GSC	HMI Old & New: Is the mode indication the same (Auto/Manual)? [YES]
5/29/99 14:43:08	3.33	GSC	HMI Old & New: Is the status indication the same? [YES]
5/29/99 14:43:22	3.34	GSC	HMI Old & New: Is the status indication the same? [YES]
5/29/99 14:43:30	3.35	GSC	HMI Old & New: Is the status indication the same? [YES]
5/29/99 14:43:51	3.36	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 14:44:35	3.37	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 14:44:52	3.38	GSC	HMI Old & New: Is the value back at the orginal setting? [YES]
5/29/99 14:45:07	3.39	GSC	HMI Old & New: Is the mode indication the same (Auto/Manual)? [YES]
5/29/99 14:45:19	3.40	GSC	HMI Old & New: Is the status indication the same? [YES]
5/29/99 14:45:34	3.41	GSC	HMI Old & New: Is the status indication the same? [YES]
5/29/99 14:45:49	3.42	GSC	HMI Old & New: Is the status indication the same? [YES]
5/29/99 14:47:56	3.43	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 14:48:03	3.44	GSC	HMI Old & New: Is the value back at the orginal setting? [YES]
5/29/99 14:48:22	3.45	GSC	HMI Old & New: Is the lead pump indication the same? [YES]
5/29/99 14:51:27	3.47	GSC	HMI New: Is the Pump 1 Start indication off and the Pump 2 Start indication on? [YES]
5/29/99 14:51:58	3.48	GSC	HMI New: Is the Speed Control indicator pointing to AUTO? [YES]
5/29/99 14:53:56	3.49	GSC	HMI New: Is the Start Both Pumps Runtime Leveling Enabled indiciation on? [YES]
5/29/99 14:58:22	3.50	GSC	HMI Old: Is the indication for Lead Pump Select on for Booster #1. [YES]
5/29/99 14:58:34	3.51	GSC	HMI Old: Is the indication for Lead Pump Select on for Booster #2. [YES]

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5/29/99 14:58:56	3.52	GSC	HMI Old & New: Is the status indication the same? [YES]
5/29/99 14:59:36	3.53	GSC	HMI Old & New: Is the status indication the same? [YES]
5/29/99 15:02:22	3.55	GSC	HMI Old & New: Is the status indication the same? [YES]
5/29/99 15:04:33	3.56	GSC	HMI Old & New: Is the status indication the same? [YES]
5/29/99 15:05:15	3.57	GSC	HMI Old & New: Is the status indication the same? [YES]
5/29/99 15:05:49	3.59	GSC	HMI Old & New: Is the status indication the same? [YES]
5/29/99 15:06:21	3.60	GSC	HMI Old & New: Are the values (in sec.) within ± 1%? [YES]
5/29/99 15:06:33	3.61	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 15:11:57	3.63	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 15:12:18	3.64	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 15:12:24	3.65	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 15:12:33	3.66	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 15:12:43	3.67	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 15:14:06	3.68	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 15:14:10	3.69	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 15:14:13	3.70	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 15:14:16	3.71	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 15:14:19	3.72	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 15:15:03	3.73	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 15:15:08	3.74	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 15:15:15	3.75	GSC	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 15:15:18	3.76	GSC	HMI Old & New: Are the values within ± 1%? [YES]

DynCorp Test Director	5/29/99 Date	FDNW Project Manager	5/29/99 Date
FDNW Test Director	5/29/99 Date	Recorder - FDNW	5/29/99 Date
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Passing Report

Section B604WestAlarmsA

LogDate	ID	Tester	Description
5/29/99 15:37:08	3.80	GSC	[YES]
5/29/99 15:37:13	3.81	GSC	HMI New: Does the 282WC Low Temperature alarm activate? [YES]
5/29/99 15:37:20	3.82	GSC	HMI New: Does the 282WC Low Temperature alarm clear? [YES]
5/29/99 15:37:37	3.83	GSC	HMI New: Does the 282W Sump High Level alarm activate? [YES]
5/29/99 15:37:47	3.84	GSC	HMI New: Does the 282W Sump High Level alarm clear? [YES]
5/29/99 15:40:28	3.85	GSC	HMI New: Does the 282WC Sump High Level alarm activate? [YES]
5/29/99 15:40:36	3.86	GSC	HMI New: Does the 282WC Sump High Level alarm clear? [YES]
5/29/99 15:42:04	3.87	GSC	HMI New: Does the 282WC SW Low Pressure alarm activate? [YES]
5/29/99 15:42:10	3.88	GSC	HMI New: Does the 282WC SW Low Pressure alarm clear? [YES]
5/29/99 15:44:56	3.89	GSC	HMI New: Does the 282W RW Low Pressure alarm activate? [YES]
5/29/99 15:45:02	3.90	GSC	HMI New: Does the 282W RW Low Temperature alarm clear? [YES]
5/29/99 15:45:54	3.91	GSC	Lead Engineer: Has the old communications card been removed and the new communications car [YES]

DynCorp Test Director	5/29/99 Date	FDNW Project Manager	Date
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Exceptions Report

Section B604WestATP

LogDate	ID	Tester	RAA	EAA	O	Description
5/29/99 14:33:53	3.17	GSC	☒	☐	☐	HMI Old & New: Do the indications correctly track the cycling of the pump?[No]
5/29/99 14:36:26	3.18	GSC	☒	☐	☐	HMI Old & New: Do the indications correctly track the[No: Yes on event log but not displayed on fa]
5/29/99 14:38:05	3.19	GSC	☒	☐	☐	HMI Old & New: Do the indications correctly track the cycling of the pu[No: Can,t run until 6/1/99]
5/29/99 14:38:23	3.20	GSC	☒	☐	☐	HMI Old & New: Do the indications correctly track the cycling of the pu[No: Can,t run until 6/1/99]
5/29/99 14:49:34	3.46	GSC	☒	☐	☐	HMI New: Is the Pump 1 Start indication on?[No: Yes on faceplate/No on screen]
5/29/99 15:02:11	3.54	GSC	☐	☒	☐	HMI Old & New: Is the status indication the same?[No: Delete "to stop pump" otherwise OK]
5/29/99 15:05:40	3.58	GSC	☐	☒	☐	HMI Old & New: Is the status indication the same?[No: Delete "to stop pump" otherwise OK]
5/29/99 15:10:39	3.62	GSC	☒	☐	☐	HMI Old & New: Are the values within ± 1%?[No: missing values]
5/29/99 15:15:46	3.77	GSC	☐	☒	☐	HMI Old & New: Are the values within ± 1%?[No: No faceplate]
5/29/99 15:15:56	3.78	GSC	☐	☒	☐	HMI Old & New: Are the values within ± 1%?[No: No faceplate]
5/29/99 15:16:20	3.79	GSC	☐	☒	☐	HMI Old & New: Are the values within ± 1%?[No: No faceplate]

~~3.91 OLD COM CARD STILL TO BE REMOVED~~ RS 5/29/99

[signature]	5/29/99	[signature]	5/29/99	[signature]	5/29/99
DynCorp Test Director	Date	FDNW Project Manager	Date	FDNW Test Director	Date
[signature]	5/29/99	[signature]	5/29/99	[signature]	5/29/99
Recorder - FDNW	Date	Authorized Inspector-FDH	Date	Witness	Date

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RS 6/25/99

SEE PAGE 2

EXCEPTIONS REPORT

SECTION "B604WEST ATP"

3.17
3.18 — CORRECTED IN LOGIC
TLS 6/28/99

3.19
3.20 — TESTED ACCEPTABLE DURING WEEKLY OPS. RUN
TLS ~~6/28/99~~ 9/23/99

3.46 — FIXED DURING ATP. ACCEPTED
TLS 9/23/99

3.54
3.58 — ACCEPTED AS-IS. ATP CALLS FOR WRONG RESPONSE, SYSTEM BEHAVES AS IT SHOULD. SEE NOTE @ STEP.
9/23/99 TLS

3.62 — CORRECTED AFTER ATP WAS RUN.
1/4/00 [signature]

3.77
3.78
3.79 — FEATURE WAS NOT PROGRAMED ONTO NEW HMI. ACCEPTED AS-IS BY J. DAY OF OPERATIONS
[signature] 1/4/00

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TLS
6/28/99

4.0 L-286 Network Communications ATP

4.01	Send an HMI operator to 283W, 282WC, 283E and 282EC and establish communications via handheld radio or telephone. All Facility HMIs: Is an operator located in each facility and has communications been established?
4.02	Send an additional HMI operator to 283W to establish a connection to the network via the laptop and cell phone. Laptop HMI: Has communications been established?
4.03	Laptop HMI: Transition through all the Screens and faceplates. LOGON TO HTML ✓ Laptop HMI: Were you able to view all the screens and faceplates?
4.04	283W HMI: Verify HMIs are in communication with the 283W PLC. 283W HMI: Is the 283W communication light blinking?
4.05	283E HMI: Verify HMIs are in communication with the 283E PLC. 283E HMI: Is the 283E communication light blinking?
4.06	282WC HMI: Verify HMIs are in communication with the 282WC PLC. 282WC HMI: Is the 282WC communication light blinking?
4.07	282EC HMI: Verify HMIs are in communication with the 282EC PLC. 282EC HMI: Is the 282EC communication light blinking?
4.08	All HMIs: Verify HMIs are in communication with all other PLCs. All HMIs: Are the 283W, 283E, 282WC and 282EC communiciation lights blinking?
Prep	All HMIs: Go to the WEST WTP Screen.
Prep	All HMIs: Go to the ALUM CONTROL Faceplate.

Prep	Operator: Prepare to run ALUM Feeder #1 (or #2).
4.09	283W HMI: Switch operational mode to "MAN". All HMIs: Is the indicator now pointing to MAN and green?
4.10	283W HMI: Increase the GAL/CYCLE to ~~100%~~. 300 GALLONS TLS All HMIs: Does the GAL/CYCLE increase to ~~100%~~? 300 GALLONS
4.11	283W HMI: Decrease the GAL/CYCLE to original position. All HMIs: Is the GAL/CYCLE back at its original value?
4.12	283W HMI: Switch operational mode to "OFF". All HMIs: Is the indicator now pointing to OFF and ~~green~~? RED TLS
4.13	283E HMI: Switch operational mode to "MAN". All HMIs: Is the indicator now pointing to MAN and ~~green~~? TLS ~~RED~~ OK
4.14	283E HMI: Switch operational mode to "OFF". All HMIs: Is the indicator now pointing to OFF and ~~green~~? TL RED TLS
4.15	282WC HMI: Switch operational mode to "MAN". All HMIs: Is the indicator now pointing to MAN and ~~green~~? ~~RED~~ OK
4.16	282WC HMI: Switch operational mode to "OFF". All HMIs: Is the indicator now pointing to OFF and ~~green~~? RED TL
4.17	282EC HMI: Switch operational mode to "MAN". All HMIs: Is the indicator now pointing to MAN and ~~green~~? OK ~~RED~~ TLS
4.18	282EC HMI: Switch operational mode to "OFF". All HMIs: Is the indicator now pointing to OFF and ~~green~~? RED
4.19	Laptop HMI: Switch operational mode to "MAN". All HMIs: Is the indicator now pointing to MAN and green?

4.20	Laptop HMI: Switch operational mode to "OFF". All HMIs: Is the indicator now pointing to OFF and ~~green~~? Red TS
4.21	Operator: Trigger the 282WC Low Temperature alarm. All HMIs: Does the 282WC Low Temperature alarm activate?
4.22	283W HMI: ACK all alarms. All HMIs: Does the 282WC Low Temperature alarm stop blinking?
4.23	Operator: Reset the 282WC Low Temperature alarm. All HMIs: Does the 282WC Low Temperature alarm clear?
4.24	Operator: Trigger the 282WC Low Temperature alarm. All HMIs: Does the 282WC Low Temperature alarm activate?
4.25	282WC HMI: ACK all alarms. All HMIs: Does the 282WC Low Temperature alarm stop blinking?
4.26	Operator: Reset the 282WC Low Temperature alarm. All HMIs: Does the 282WC Low Temperature alarm clear?
4.27	Operator: Trigger the 282WC Low Temperature alarm. All HMIs: Does the 282WC Low Temperature alarm activate?
4.28	283E HMI: ACK all alarms. All HMIs: Does the 282WC Low Temperature alarm stop blinking?
4.29	Operator: Reset the 282WC Low Temperature alarm. All HMIs: Does the 282WC Low Temperature alarm clear?
4.30	Operator: Trigger the 282WC Low Temperature alarm. All HMIs: Does the 282WC Low Temperature alarm activate?
4.31	282EC HMI: ACK all alarms. All HMIs: Does the 282WC Low Temperature alarm stop blinking?

4.32	Operator: Reset the 282WC Low Temperature alarm. All HMIs: Does the 282WC Low Temperature alarm clear?
4.33	Operator: Trigger the 282WC Low Temperature alarm. All HMIs: Does the 282WC Low Temperature alarm activate?
4.34	Laptop HMI: ACK all alarms. All HMIs: Does the 282WC Low Temperature alarm stop blinking?
4.35	Operator: Reset the 282WC Low Temperature alarm. All HMIs: Does the 282WC Low Temperature alarm clear?
Prep	All HMIs: Close the ALUM CONTROL Faceplate.
Prep	283W HMI: Verify event log.

6/7/1999
Insert following steps after 4.3.5:

Prep ~~4.3.6~~ HMI: Log in as administrator and go to the Operator Input Screen

4.36 ~~4.3.6~~ Click VIEW REPORT and open the state report template (BOOK098W.XLT)

4.37 ~~4.3.7~~. Does the file open?
Refresh data and select Print from the file menu.
Does the data appear correctly?

Prep Close Excel* and log out of the HMI.

*Excel is a trademark of Microsoft Corp.

6/7/99

6/7/99

6/7/99

Passing Report

Section L286CommoATP

LogDate	ID	Tester	Description
6/7/99 16:06:43	4.01	GSC	All Facility HMIs: Is an operator located in each facility and has communications been est [YES]
6/7/99 16:06:48	4.02	GSC	Laptop HMI: Has communications been established? [YES]
6/7/99 16:06:51	4.03	GSC	Laptop HMI: Were you able to view all the screens and faceplates? [YES]
6/7/99 16:06:56	4.04	GSC	283W HMI: Is the 283W communication light blinking? [YES]
6/7/99 16:07:01	4.05	GSC	283E HMI: Is the 283E communication light blinking? [YES]
6/7/99 16:07:05	4.06	GSC	282WC HMI: Is the 282WC communication light blinking? [YES]
6/7/99 16:07:09	4.07	GSC	282EC HMI: Is the 282EC communication light blinking? [YES]
6/7/99 16:07:14	4.08	GSC	All HMIs: Are the 283W, 283E, 282WC and 282EC communiciation lights blinking? [YES]
6/7/99 16:07:25	4.09	GSC	All HMIs: Is the indicator now pointing to MAN and green? [YES]
6/7/99 16:07:29	4.10	GSC	All HMIs: Does the GAL/CYCLE increase to 300? [YES]
6/7/99 16:07:33	4.11	GSC	All HMIs: Is the GAL/CYCLE back at its original value? [YES]
6/7/99 16:07:36	4.12	GSC	All HMIs: Is the indicator now pointing to OFF and RED? [YES]
6/7/99 16:07:41	4.13	GSC	All HMIs: Is the indicator now pointing to MAN and GREEN? [YES]
6/7/99 16:07:46	4.14	GSC	All HMIs: Is the indicator now pointing to OFF and RED? [YES]
6/7/99 16:07:50	4.15	GSC	All HMIs: Is the indicator now pointing to MAN and GREEN? [YES]
6/7/99 16:07:55	4.16	GSC	All HMIs: Is the indicator now pointing to OFF and RED? [YES]
6/7/99 16:08:16	4.17	GSC	All HMIs: Is the indicator now pointing to MAN and GREEN? [YES]
6/7/99 16:08:40	4.18	GSC	All HMIs: Is the indicator now pointing to OFF and RED? [YES]
6/7/99 16:09:18	4.19	GSC	All HMIs: Is the indicator now pointing to MAN and GREEN? [YES]
6/7/99 16:09:50	4.20	GSC	All HMIs: Is the indicator now pointing to OFF and RED? [YES]

DynCorp Test Director	6/7/99 Date	FDNW Project Manager	6/7/99 Date
FDNW Test Director	6/7/99 Date	Recorder - FDNW	6/7/99 Date
Authorized Inspector - FDH	6/7/99 Date	Witness	6/7/99 Date

6/7/99 16:11:06	4.21	GSC	All HMIs: Does the 282WC Low Temperature alarm activate? [YES]
6/7/99 16:11:36	4.22	GSC	All HMIs: Does the 282WC Low Temperature alarm stop blinking? [YES]
6/7/99 16:12:24	4.23	GSC	All HMIs: Does the 282WC Low Temperature alarm clear? [YES]
6/7/99 16:13:02	4.24	GSC	All HMIs: Does the 282WC Low Temperature alarm activate? [YES]
6/7/99 16:14:11	4.25	GSC	All HMIs: Does the 282WC Low Temperature alarm stop blinking? [YES]
6/7/99 16:14:52	4.26	GSC	All HMIs: Does the 282WC Low Temperature alarm clear? [YES]
6/7/99 16:15:28	4.27	GSC	All HMIs: Does the 282WC Low Temperature alarm activate? [YES]
6/7/99 16:17:33	4.28	GSC	All HMIs: Does the 282WC Low Temperature alarm stop blinking? [YES]
6/7/99 16:18:04	4.29	GSC	All HMIs: Does the 282WC Low Temperature alarm clear? [YES]
6/7/99 16:18:39	4.30	GSC	All HMIs: Does the 282WC Low Temperature alarm activate? [YES]
6/7/99 16:29:14	4.32	GSC	All HMIs: Does the 282WC Low Temperature alarm clear? [YES]
6/7/99 16:29:43	4.33	GSC	All HMIs: Does the 282WC Low Temperature alarm activate? [YES]
6/7/99 16:30:46	4.34	GSC	All HMIs: Does the 282WC Low Temperature alarm stop blinking? [YES]
6/7/99 16:37:21	4.35	GSC	All HMIs: Does the 282WC Low Temperature alarm clear? [YES]

Tony McCl	6/7/99	Brian Hanson	6/7/99.
DynCorp Test Director	Date	FDNW Project Manager	Date
	6/7/99	Gregory Carpenter	6/7/99
FDNW Test Director	Date	Recorder - FDNW	Date
	6/7/99		6/7/99
Authorized Inspector - FDH	Date	Witness	Date

Exceptions Report

Section L286CommoATP

LogDate	ID	Tester	RAA	EAA	O	Description
6/7/99 16:28:08	4.31	GSC	☐	☒	☐	All HMIs: Does the 282WC Low Temperature alarm stop b[No: Laptop lost conn w/network & could not g]

4.37 ** State report data does not appear correctly.
CSO 6/7/1999

NOT RECORDED: LAPTOP TEXT SIZE NOT READABLE, BOTTOM MENU
RS 6/8/99
6/8/99.

133 4.31 + LAPTOP — ACCEPTED AS-IS BY OPERATIONS. 1/4/00 RS

4.37 — COMPLETED 1/4/00 RS

Tony McM	6/7/99	Brian C. Howard	6/7/99.		6/7/99
DynCorp Test Director	Date	FDNW Project Manager	Date	FDNW Test Director	Date
Gregory Lampert	6/7/99		6/7/99		6/7/99
Recorder - FDNW	Date	Authorized Inspector - FDH	Date	Witness	Date

5. ACCEPTANCE TEST 200 EAST B-604

SEE #3.* FOR DCN COVER

5.0 B604 East ATP

5.01	HMI: Verify HMIs are in communication with the 283E and 282EC PLCs. HMI New: Are the 283E and 282EC communication lights blinking?
Prep	HMI New: Go to the EAST FIRE/RAW WATER SYSTEMS Screen.
Prep	HMI Old: Go to the RAW WATER STATUS Screen.
5.02	HMI Old & New: Compare the value for the RW Reservoir Fill Valve Position. HMI Old & New: Are the values within ± 1%?
5.03	HMI Old & New: Compare the value for the Export Water Pressure. HMI Old & New: Are the values within ± 1%?
5.04	HMI Old & New: Compare the value for the Booster Pump # 1 Speed. HMI Old & New: Are the values within ± 1%?
5.05	HMI Old & New: Compare the value for the Booster Pump # 2 Speed. HMI Old & New: Are the values within ± 1%?
5.06	HMI Old & New: Compare the value for the Raw Water Reservoir Level Setpoint. HMI Old & New: Are the values within ± 1%?
5.07	HMI New: Change the Raw Water Reservoir Level Setpoint by a minimum of 20%. HMI Old & New: Are the values within ± 1%?
5.08	HMI New: Reset the Raw Water Reservoir Level Setpoint back to original value. HMI Old & New: Are the values within ± 1%?
5.09	HMI Old & New: Compare the status for the RW Pressure. HMI Old & New: Are the values within ± 1%?

5.10	HMI Old & New: Compare the status for the RW Pressure Setpoint. HMI Old & New: Are the values within ± 1%?
5.11	HMI Old & New: Compare the value for the Raw Water Flow. HMI Old & New: Are the values within ± 1%?
Prep	HMI New: Go to the EAST FIRE/RAW WATER SYSTEMS Screen.
Prep	HMI Old: Go to the SANITARY WATER SYSTEM STATUS Screen.
5.12	HMI Old & New: Compare the value for the Temperature Control Valve Position. HMI Old & New: Are the values within ± 1%?
5.13	HMI Old & New: Compare the value for the 2" Fill Valve Position. HMI Old & New: Are the values within ± 1%?
5.14	HMI Old & New: Compare the value for the 4" Fill Valve Position. HMI Old & New: Are the values within ± 1%?
5.15	HMI Old & New: Compare the value for the Sanitary Water Pressure. HMI Old & New: Are the values within ± 1%?
5.16	HMI Old & New: Compare the value for the SW Reservoir Level. HMI Old & New: Are the values within ± 1%?
5.17	Operator: Cycle the RW Jockey Pump. HMI Old & New: Do the indications correctly track the cycling of the pump?
5.18	Operator: Cycle the SW Jockey Pump. HMI Old & New: Do the indications correctly track the cycling of the pump?
5.19	Operator: Cycle the ESW Fire Pump. HMI Old & New: Do the indications correctly track the cycling of the pump?

5.20	Operator: Cycle the ERW Fire Pump. HMI Old & New: Do the indications correctly track the cycling of the pump?
Prep	HMI Old: Go to the SYSTEM CONTROL Screen.
Prep	HMI New: Go to the EAST SW RES LVL Faceplate.
5.21	HMI New: Adjust the Setpoint for the SW Reservoir Level. HMI Old & New: Are the values within ± 1%?
5.22	HMI New: Return the Setpoint for the SW Reservoir Level to the orginal setting. HMI Old & New: Is the value back at the orginal setting?
5.23	HMI Old & New: Compare the operational mode for the 2" and 4" Fill Valves. HMI Old & New: Is the mode indication the same (Auto/Manual)?
5.24	HMI New: Set the 2" Fill Valve to MANUAL HMI Old & New: Is the status indication the same?
5.25	HMI New: Increase the 2" Fill Valve by 10%. HMI Old & New: Is the status indication the same?
5.26	HMI New: Decrease the 2" Fill Valve back to original position. HMI Old & New: Is the status indication the same?
5.27	HMI New: Set the 4" Fill Valve to MANUAL HMI Old & New: Is the status indication the same?
5.28	HMI New: Increase the 4" Fill Valve by 10%. HMI Old & New: Is the status indication the same?
5.29	HMI New: Decrease the 4" Fill Valve back to original position. HMI Old & New: Is the status indication the same?

Prep	HMI New: Go to the EAST SW TEMP CTRL Faceplate.
5.30	HMI New: Adjust the Setpoint for the SW Reservoir Temperature. HMI Old & New: Are the values within ± 1%?
5.31	HMI New: Return the Setpoint for the Temperature to the orginal setting. HMI Old & New: Is the value back at the orginal setting?
5.32	HMI Old & New: Compare the operational mode for the SW Reservoir Steam Valve (Temp Control Valve). HMI Old & New: Is the mode indication the same (Auto/Manual)?
5.33	HMI New: Set the Temperature Control Valve to MANUAL HMI Old & New: Is the status indication the same?
5.34	HMI New: Increase the Temperature Control Valve to 10%. HMI Old & New: Is the status indication the same?
5.35	HMI New: Decrease the Temperature Control Valve back to 0%. HMI Old & New: Is the status indication the same?
5.36	HMI Old & New: Compare the value for the SW Reservoir Temperature. HMI Old & New: Are the values within ± 1%?
Prep	HMI New: Go to the EAST ERW RES FILL Faceplate.
5.38	HMI New: Adjust the Setpoint for the ERW Reservoir Level. HMI Old & New: Are the values within ± 1%?
5.39	HMI New: Return the Setpoint for the ERW Reservoir Level to the orginal setting. HMI Old & New: Is the value back at the orginal setting?

5.40	HMI Old & New: Compare the operational mode for the RW Reservoir Fill Valve. HMI Old & New: Is the mode indication the same (Auto/Manual)?
5.41	HMI New: Set the RW Reservoir Fill Valve to MANUAL HMI Old & New: Is the status indication the same?
5.42	HMI New: Increase the RW Reservoir Fill Valve to 10%. HMI Old & New: Is the status indication the same?
5.43	HMI New: Decrease the RW Reservoir Fill Valve back to 0%. HMI Old & New: Is the status indication the same?
Prep	HMI New: Go to the EAST RW BSTR PUMPS Faceplate.
Prep	Operator: Prepare to Cycle/Run both RW Booster Pumps.
5.44	HMI New: Adjust the Setpoint for the RW Pressure. HMI Old & New: Are the values within ± 1%?
5.45	HMI New: Return the Setpoint for the RW Pressure to the orginal setting. HMI Old & New: Is the value back at the orginal setting?
5.46	HMI Old & New: Compare the Lead Pump selected. HMI Old & New: Is the lead pump indication the same?
5.47	HMI Old: Set Booster Pump 1 to MN. HMI New: Is the Pump 1 Start indication on?
5.48	HMI Old: Set Booster Pump 1 to OFF and Booster Pump 2 to MN (Run at minimum speed). HMI New: Is the Pump 1 Start indication off and the Pump 2 Start indication on?

5.49	HMI Old: Reset Both Booster Pumps 1 & 2 to OFF and set BSTR Pump Mode Control to AUTO. HMI New: Is the Speed Control indicator pointing to AUTO?
5.50	HMI Old: Reset Both Booster Pumps 1 & 2 to AUTO (Run at minimum speed). HMI New: Is the Start Both Pumps Runtime Leveling Enabled indiciation on?
Prep	HMI Old: Reset BSTR Pump Mode Control to MANUAL and Booster Pumps to OFF.
5.51	HMI New: Click on the Pump 1 - Lead Select button. HMI Old: Is the indication for Lead Pump Select on for Booster #1.
5.52	HMI New: Click on the Pump 2 - Lead Select button. HMI Old: Is the indication for Lead Pump Select on for Booster #2.
Prep	HMI Old & New: Reset Booster Pump settings to original conditions.
5.53	HMI New: Set Booster Pump #1 to MANUAL HMI Old & New: Is the status indication the same?
5.54	HMI New: Start Booster Pump #1 and run to 10%. HMI Old & New: Is the status indication the same?
5.55	HMI New: Run Booster Pump #1 back to 0% to stop pump. HMI Old & New: Is the status indication the same?
5.56	HMI New: Set Booster Pump #1 to OFF. HMI Old & New: Is the status indication the same?
5.57	HMI New: Set Booster Pump #2 to MANUAL HMI Old & New: Is the status indication the same?

5.58	HMI New: Start Booster Pump #2 and run to 10%. HMI Old & New: Is the status indication the same?
5.59	HMI New: Run Booster Pump #2 back to 0% to stop pump. HMI Old & New: Is the status indication the same?
5.60	HMI New: Set Booster Pump #2 to OFF. HMI Old & New: Is the status indication the same?
Prep	HMI Old: Go to the SYSTEM TUNING Screen.
Prep	HMI New: Go to the EAST RW BSTR PUMPS PID CTRL Faceplate.
5.61	HMI Old & New: Compare the Sample Period. HMI Old & New: Are the values (in sec.) within ± 1%?
5.62	HMI Old & New: Compare the Sample Size. HMI Old & New: Are the values within ± 1%?
5.63	HMI Old & New: Compare the various Control parameters. HMI Old & New: Are the values within ± 1%?
Prep	HMI New: Go to the EAST SW RES LVL PID CTRL Faceplate.
5.64	HMI Old & New: Compare the value for the SW Reservoir Level Setpoint. HMI Old & New: Are the values within ± 1%?
5.65	HMI Old & New: Compare the Signal Multiplier. HMI Old & New: Are the values within ± 1%?
5.66	HMI Old & New: Compare the Control Threshold. HMI Old & New: Are the values within ± 1%?

5.67	HMI Old & New: Compare the Increment Step. HMI Old & New: Are the values within ± 1%?
5.68	HMI Old & New: Compare the Decrement Step. HMI Old & New: Are the values within ± 1%?
Prep	HMI New: Go to the EAST ERW RES FILL PID CTRL Faceplate.
5.69	HMI Old & New: Compare the value for the Raw Water Reservoir Level. HMI Old & New: Are the values within ± 1%?
5.70	HMI Old & New: Compare the Signal Multiplier. HMI Old & New: Are the values within ± 1%?
5.71	HMI Old & New: Compare the Control Threshold. HMI Old & New: Are the values within ± 1%?
5.72	HMI Old & New: Compare the Increment Step. HMI Old & New: Are the values within ± 1%?
5.73	HMI Old & New: Compare the Decrement Step. HMI Old & New: Are the values within ± 1%?
Prep	HMI New: Go to the EAST SW TEMP CTRL PID CTRL Faceplate.
5.74	HMI Old & New: Compare the Signal Multiplier. HMI Old & New: Are the values within ± 1%?
5.75	HMI Old & New: Compare the Control Threshold. HMI Old & New: Are the values within ± 1%?
5.76	HMI Old & New: Compare the Increment Step. HMI Old & New: Are the values within ± 1%?

5.77	HMI Old & New: Compare the Decrement Step. HMI Old & New: Are the values within ± 1%?
Prep	HMI New: Go to the EAST FIRE PUMP SETTINGS Faceplate.
5.78	HMI Old & New: Compare the Fire Pump Start Delay. HMI Old & New: Are the values within ± 1%?
5.79	HMI Old & New: Compare the SW Fire Pump Start Setpoint. HMI Old & New: Are the values within ± 1%?
5.80	HMI Old & New: Compare the RW Fire Pump Start Setpoint. HMI Old & New: Are the values within ± 1%?
5.81	HMI New: Go to the ALARMS Screen.
5.82	Operator: Manually trigger the 282EC Low Temperature alarm. HMI New: Does the 282EC Low Temperature alarm activate?
Prep	HMI New: ACK all alarms.
5.83	Operator: Return 282EC Temperature intrumentation to original condition. HMI New: Does the 282EC Low Temperature alarm clear?
5.84	Operator: Manually trigger the 282E Sump High Level alarm. HMI New: Does the 282E Sump High Level alarm activate?
Prep	HMI New: ACK all alarms.
5.85	Operator: Return 282E Sump Level intrumentation to original condition. HMI New: Does the 282E Sump High Level alarm clear?

5.86	Operator: Manually trigger the 282EC Sump High Level alarm. HMI New: Does the 282EC Sump High Level alarm activate?
Prep	HMI New: ACK all alarms.
5.87	Operator: Return 282EC Sump Level Intrumentation to original condition. HMI New: Does the 282EC Sump High Level alarm clear?
5.88	Operator: Manually trigger the 282EC SW Low Pressure alarm. HMI New: Does the 282EC SW Low Pressure alarm activate?
Prep	HMI New: ACK all alarms.
5.89	Operator: Return 282EC SW Pressure Intrumentation to original condition. HMI New: Does the 282EC SW Low Pressure alarm clear?
5.90	Operator: Manually trigger the 282E RW Low Pressure alarm. HMI New: Does the 282E RW Low Pressure alarm activate?
Prep	HMI New: ACK all alarms.
5.91	Operator: Return 282E RW Pressure Intrumentation to original condition. HMI New: Does the 282E RW Low Pressure alarm clear?
~~5.94~~ 92	Lead Engineer: Remove the old HMI and communication card and relocate the new communication card. Lead Engineer: Has the old communications card been removed and the new commo card been relocated?
Prep	HMI: Close the HMI Faceplates and verify event log.

Passing Report

Section B604EastAlarmsA

LogDate	ID	Tester	Description
5/29/99 7:12:00 PM	5.81	CSG	[YES]
5/29/99 7:12:19 PM	5.82	CSG	HMI New: Does the 282EC Low Temperature alarm activate? [YES]
5/29/99 7:12:34 PM	5.83	CSG	HMI New: Does the 282EC Low Temperature alarm clear? [YES]
5/29/99 7:18:14 PM	5.84	CSG	HMI New: Does the 282E Sump High Level alarm activate? [YES]
5/29/99 7:18:37 PM	5.85	CSG	HMI New: Does the 282E Sump High Level alarm clear? [YES]
5/29/99 7:23:51 PM	5.86	CSG	HMI New: Does the 282EC Sump High Level alarm activate? [YES]
5/29/99 7:24:00 PM	5.87	CSG	HMI New: Does the 282EC Sump High Level alarm clear? [YES]
5/29/99 7:24:57 PM	5.88	CSG	HMI New: Does the 282EC SW Low Pressure alarm activate? [YES]
5/29/99 7:25:06 PM	5.89	CSG	HMI New: Does the 282EC SW Low Pressure alarm clear? [YES]
5/29/99 7:25:13 PM	5.90	CSG	HMI New: Does the 282E RW Low Pressure alarm activate? [YES]
5/29/99 7:25:20 PM	5.91	CSG	HMI New: Does the 282E RW Low Pressure alarm clear? [YES]
5/29/99 7:25:28 PM	5.92	CSG	Lead Engineer: Has the old communications card been removed and the ne commo card been re [YES]

Section B604EastATP

LogDate	ID	Tester	Description
5/29/99 6:32:28 PM	5.01	CSG	HMI New: Are the 283E and 282EC communication lights blinking? [YES]
5/29/99 6:33:04 PM	5.02	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 6:33:22 PM	5.03	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 6:33:37 PM	5.04	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 6:33:41 PM	5.05	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 6:34:10 PM	5.06	CSG	HMI Old & New: Are the values within ± 1%? [YES]

DynCorp Test Director	6/28/99 Date	FDNW Project Manager	6/7/99 Date
FDNW Test Director	6/7/99 Date	Recorder - FDNW	6/7/99 Date
Authorized Inspector - FDH	6/7/99 Date	Witness	6/7/1999 Date

5/29/99 6:34:47 PM	5.07	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 6:35:04 PM	5.08	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 6:35:21 PM	5.09	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 6:35:52 PM	5.10	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 6:36:14 PM	5.11	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 6:36:53 PM	5.12	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 6:37:00 PM	5.13	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 6:37:06 PM	5.14	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 6:37:17 PM	5.15	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 6:37:35 PM	5.16	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 6:45:33 PM	5.21	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 6:45:50 PM	5.22	CSG	HMI Old & New: Is the value back at the orginal setting? [YES]
5/29/99 6:46:43 PM	5.23	CSG	HMI Old & New: Is the mode indication the same (Auto/Manual)? [YES]
5/29/99 6:46:54 PM	5.24	CSG	HMI Old & New: Is the status indication the same? [YES]
5/29/99 6:47:10 PM	5.25	CSG	HMI Old & New: Is the status indication the same? [YES]
5/29/99 6:47:20 PM	5.26	CSG	HMI Old & New: Is the status indication the same? [YES]
5/29/99 6:47:29 PM	5.27	CSG	HMI Old & New: Is the status indication the same? [YES]
5/29/99 6:47:45 PM	5.28	CSG	HMI Old & New: Is the status indication the same? [YES]
5/29/99 6:47:57 PM	5.29	CSG	HMI Old & New: Is the status indication the same? [YES]
5/29/99 6:48:43 PM	5.30	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 6:49:09 PM	5.31	CSG	HMI Old & New: Is the value back at the orginal setting? [YES]
5/29/99 6:49:31 PM	5.32	CSG	HMI Old & New: Is the mode indication the same (Auto/Manual)? [YES]
5/29/99 6:49:39 PM	5.33	CSG	HMI Old & New: Is the status indication the same? [YES]
5/29/99 6:49:53 PM	5.34	CSG	HMI Old & New: Is the status indication the same? [YES]
5/29/99 6:50:00 PM	5.35	CSG	HMI Old & New: Is the status indication the same? [YES]
5/29/99 6:50:37 PM	5.36	CSG	HMI Old & New: Are the values within ± 1%? [YES]

DynCorp Test Director	6/26/99 Date	FDNW Project Manager	6/7/99 Date
FDNW Test Director	6/7/99 Date	Recorder - FDNW	6/7/99 Date
Authorized Inspector - FDH	6/7/99 Date	Witness	6/7/99 Date

5/29/99 6:51:14 PM	5.38	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 6:51:34 PM	5.39	CSG	HMI Old & New: Is the value back at the orginal setting? [YES]
5/29/99 6:52:11 PM	5.40	CSG	HMI Old & New: Is the mode indication the same (Auto/Manual)? [YES]
5/29/99 6:52:22 PM	5.41	CSG	HMI Old & New: Is the status indication the same? [YES]
5/29/99 6:52:34 PM	5.42	CSG	HMI Old & New: Is the status indication the same? [YES]
5/29/99 6:52:40 PM	5.43	CSG	HMI Old & New: Is the status indication the same? [YES]
5/29/99 6:53:49 PM	5.44	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 6:53:55 PM	5.45	CSG	HMI Old & New: Is the value back at the orginal setting? [YES]
5/29/99 6:54:08 PM	5.46	CSG	HMI Old & New: Is the lead pump indication the same? [YES]
5/29/99 6:55:24 PM	5.47	CSG	HMI New: Is the Pump 1 Start indication on? [YES]
5/29/99 6:57:08 PM	5.48	CSG	HMI New: Is the Pump 1 Start indication off and the Pump 2 Start indicatio on? [YES]
5/29/99 6:57:32 PM	5.49	CSG	HMI New: Is the Speed Control indicator pointing to AUTO? [YES]
5/29/99 6:58:13 PM	5.50	CSG	HMI New: Is the Start Both Pumps Runtime Leveling Enabled indiciation on [YES]
5/29/99 6:58:46 PM	5.51	CSG	HMI Old: Is the indication for Lead Pump Select on for Booster #1. [YES]
5/29/99 6:59:00 PM	5.52	CSG	HMI Old: Is the indication for Lead Pump Select on for Booster #2. [YES]
5/29/99 6:59:28 PM	5.53	CSG	HMI Old & New: Is the status indication the same? [YES]
5/29/99 6:59:58 PM	5.54	CSG	HMI Old & New: Is the status indication the same? [YES]
5/29/99 7:00:33 PM	5.55	CSG	HMI Old & New: Is the status indication the same? [YES]
5/29/99 7:00:40 PM	5.56	CSG	HMI Old & New: Is the status indication the same? [YES]
5/29/99 7:00:52 PM	5.57	CSG	HMI Old & New: Is the status indication the same? [YES]
5/29/99 7:01:14 PM	5.58	CSG	HMI Old & New: Is the status indication the same? [YES]
5/29/99 7:02:11 PM	5.59	CSG	HMI Old & New: Is the status indication the same? [YES]
5/29/99 7:02:19 PM	5.60	CSG	HMI Old & New: Is the status indication the same? [YES]
5/29/99 7:03:53 PM	5.62	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 7:07:33 PM	5.64	CSG	HMI Old & New: Are the values within ± 1%? [YES]

DynCorp Test Director	6/2/99 Date	FDNW Project Manager	6/7/99 Date
FDNW Test Director	6/7/99 Date	Recorder - FDNW	6/7/99 Date
Authorized Inspector - FDH	6/7/99 Date	Witness	6/3/99 Date

6/2/99 1:37:28 PM 1:37:28 PM

5/29/99 7:07:41 PM	5.65	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 7:07:45 PM	5.66	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 7:07:50 PM	5.67	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 7:07:54 PM	5.68	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 7:08:44 PM	5.69	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 7:09:02 PM	5.70	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 7:09:07 PM	5.71	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 7:09:10 PM	5.72	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 7:09:13 PM	5.73	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 7:09:42 PM	5.74	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 7:09:50 PM	5.75	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 7:09:58 PM	5.76	CSG	HMI Old & New: Are the values within ± 1%? [YES]
5/29/99 7:10:03 PM	5.77	CSG	HMI Old & New: Are the values within ± 1%? [YES]

DynCorp Test Director	6/2/99 Date	FDNW Project Manager	6/7/99 Date
FDNW Test Director	6/7/99 Date	Recorder - FDNW	6/7/99 Date
Authorized Inspector - FDH	6/7/99 Date	Witness	6/2/99 Date

6/2/99 1:37:28 PM 1:37:28 PM

6/2
RS

Exceptions Report

Section B604 East ATP

LogDate	ID	Tester	RAA	EAA	O	Description
5/29/99 6:07:25 PM	Init	NA	☐	☐	☐	There was an error accessing the requested table
5/29/99 6:13:46 PM	Init	NA	☐	☐	☐	There was an error accessing the requested table
5/29/99 6:20:14 PM	Init	NA	☐	☐	☐	There was an error accessing the requested table

Section B604EastATP

LogDate	ID	Tester	RAA	EAA	O	Description
5/29/99 6:40:14 PM	5.17	CSG	☒	☐	☐	HMI Old & New: Do the indications correctly track the cycling o[No: ok on events, no ind on screen]
5/29/99 6:42:36 PM	5.18	CSG	☒	☐	☐	HMI Old & New: Do the indications correctly track the cyclin[No: ok on event log, no ind on screen]
5/29/99 6:43:10 PM	5.19	CSG	☒	☐	☐	HMI Old & New: Do the indications correctly track the cycli[No: need fire personnel to run (defer)]
5/29/99 6:43:53 PM	5.20	CSG	☒	☐	☐	HMI Old & New: Do the indications correctly track the cycli[No: need fire personnel to run (defer)]
5/29/99 7:03:41 PM	5.61	CSG	☒	☐	☐	HMI Old & New: Are the values (in sec.) within ± 1%?[No: missing 1/20 parameter]
5/29/99 7:06:38 PM	5.63	CSG	☒	☐	☐	HMI Old & New: Are the values within ± 1%?[No: missing: P (fine), sample interval (fine]
5/29/99 7:10:27 PM	5.78	CSG	☐	☒	☐	HMI Old & New: Are the values within ± 1%?[No: no faceplate]
5/29/99 7:10:53 PM	5.79	CSG	☐	☒	☐	HMI Old & New: Are the values within ± 1%?[No: no faceplate]

DynCorp Test Director	6/28/99 Date	FDNW Project Manager	6/7/99 Date	FDNW Test Director	6/7/99 Date
Recorder - FDNW	6/7/99 Date	Authorized Inspector - FDH	6/7/99 Date	Witness	6/7/99 Date

6/2/99 1:37:43 PM 1:37:43 PM

TRS 6/2

5/29/99 7:11:02 PM 5.80 CSG ☐ ☒ ☐ HMI Old & New: Are the values within ± 1%?[No: no faceplate]

5.17, 5.18 } FIXED AFTER ATP, ACCEPTABLE RS 6/28/99

5.19, 5.20 } TESTED ACCEPTABLE DURING WEEKLY OPS RUN RS 9/23/99

5.61 } FIXED DURING (@ END) ATP. RS 9/23/99

5.63 } CORRECTED AFTER ATP WAS RUN RS 1/4/00

5.78, 5.79, 5.80 } FEATURE WAS NOT PROGRAMED ONTO NEW HMI. ACCEPTED AS-IS BY J. DAY OF OPERATIONS Thom Smith 1/4/00

150

Thomas Smith	6/28/99	Brian C Hanson	6/7/99	Gregory Karpenko	6/7/99
DynCorp Test Director	Date	FDNW Project Manager	Date	FDNW Test Director	Date
Gregory Karpenko	6/7/99	E Enbeck	6/7/99	Witness	6/28/99
Recorder - FDNW	Date	Authorized Inspector -FDH	Date		Date

6/2/99 1:37:43 PM 1:37:43 PM

RS 6/2

HNF-4524 Rev. 0

6.1 Chlorine Analyzers ATP

6.1.01	HMI: Verify HMI is in communication with the 283E PLC. HMI: Is the 283E communication light blinking?
Prep	HMI: Go to the EAST CHLORINE FEED SYSTEM Faceplate.
Prep	HMI: DWG H-2-827237 SH 1 (Ref. for the next steps).
Prep	Technician: Go to the Existing Residual Chlorine Meter (WX07) (AI_283E_203).
6.1.02	Technician: Lift the wires from the plus (TB3-FU7) and minus (TB3-13) terminals. HMI: Does the "XMTR FAIL" alarm for the Existing Residual Chlorine Meter activate?
Prep	HMI: ACK "XMTR FAIL" alarm for the Existing Residual Chlorine Meter.
6.1.03	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the ~~Effluent~~ INFLUENT Chlorine Residual Level = 0 ppm ± 1%?
6.1.04	Technician: Reset the simulator to 20 mA. HMI: Is the ~~Effluent~~ INFLUENT Chlorine Residual Level = 10 ppm ± 1%?
6.1.05	Technician: Land the wires back on the plus (TB3-FU7) and minus (TB3-13) terminals. HMI: Does the "XMTR FAIL" alarm for the Existing Residual Chlorine Meter clear?
Prep	Technician: Go to the New Residual Chlorine Meter (WX17) (AI_283E_207).
6.1.06	Technician: Lift the wires from the plus (TB3-FU12) and minus (TB3-23) terminals. HMI: Does the "XMTR FAIL" alarm for the New Residual Chlorine Meter activate?

Prep	HMI: ACK "XMTR FAIL" alarm for the New Residual Chlorine Meter.
6.1.07	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the Effluent Chlorine Residual Level = 0 ppm ± 1%?
6.1.08	Technician: Reset the simulator to 20 mA. HMI: Is the Effluent Chlorine Residual Level = 10 ppm ± 1%?
6.1.09	Technician: Land the wires back on the plus (TB3-FU12) and minus (TB3-23) terminals. HMI: Does the "XMTR FAIL" alarm for the New Residual Chlorine Meter clear?
6.1.10	Lead Engineer: Verify that the New Residual Chlorine Meter has been commissioned and calibrated. Lead Engineer: Has the New Residual Chlorine Meter has been commissioned and calibrated? *
Prep	HMI: Close the EAST CHLORINE FEED SYSTEM Faceplate and verify event log.

* – NOT SET UP / CALIBRATION
– NO SENSE LINE
– NO SOLUTION

* Cl_2 M/U % TAG

Passing Report

Section CHLANLATP

LogDate	ID	Tester	Description
5/28/99 12:14:30	6.1.01	GSC	HMI: Is the 283E communication light blinking? [YES]
5/28/99 12:15:34	6.1.02	GSC	HMI: Does the "XMTR FAIL" alarm for the Existing Residual Chlorine Meter activate? [YES]
5/28/99 12:15:58	6.1.03	GSC	HMI: Is the Effluent Chlorine Residual Level = 0 ppm ± 1%? [YES]
5/28/99 12:18:03	6.1.04	GSC	HMI: Is the Effluent Chlorine Residual Level = 10 ppm ± 1%? [YES]
5/28/99 12:21:14	6.1.05	GSC	HMI: Does the "XMTR FAIL" alarm for the Existing Residual Chlorine Meter clear? [YES]
5/28/99 12:21:49	6.1.06	GSC	HMI: Does the "XMTR FAIL" alarm for the New Residual Chlorine Meter activate? [YES]
5/28/99 12:22:36	6.1.07	GSC	HMI: Is the Effluent Chlorine Residual Level = 0 ppm ± 1%? [YES]
5/28/99 12:22:47	6.1.08	GSC	HMI: Is the Effluent Chlorine Residual Level = 10 ppm ± 1%? [YES]
5/28/99 12:24:49	6.1.09	GSC	HMI: Does the "XMTR FAIL" alarm for the New Residual Chlorine Meter clear? [YES]

DynCorp Test Director	5/28/99 Date	FDNW Project Manager	5/29/99 Date
FDNW Test Director	5/28/99 Date	Recorder - FDNW	6/30/99 Date
Authorized Inspector - FDH	5/28/99 Date	Witness	6/30/99 Date

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Exceptions Report

Section B604 East ATP

LogDate	ID	Tester	RAA	EAA	O	Description
5/28/99 12:08:24	Init	NA	☐	☒	☐	There was an error accessing the requested table

RS 6/28/99

Section CHLANLATP

LogDate	ID	Tester	RAA	EAA	O	Description
5/28/99 12:25:39	6.1.10	GSC	☐	☒	☐	Lead Engineer: Has the New Residual Chlorine Meter has been commi[No: Not calibrated/commissioned.]

6.1.10] - COMMISIONED BY OPERATIONS | MAINTENANCE AFTER ATP WAS DONE.

1/4/00

Thom Smart

Thomas Smart	5/28/99	Brian C. Hanson	5/28/99	Gregory J. Carpenter	5/28/99
DynCorp Test Director	Date	FDNW Project Manager	Date	FDNW Test Director	Date
Wm Thom	6/30/99	T B Clarke	5/28/99	[illegible]	6/30/99
Recorder - FDNW	Date	Authorized Inspector -FDH	Date	Witness	Date

5/28/99 12:37:01 12:37:01

6.2 Makeup Water Valve and Instrumentation ATP

6.2.01	HMI: Verify HMI is in communication with the 283E PLC. HMI: Is the 283E communication light blinking?
Prep	HMI: Go to the EAST WTP Page 2 Faceplate.
Prep	HMI: Go to the MAKEUP VALVE Faceplate.
Prep	HMI: DWG H-2-827237 SH 3 (Ref. for the next steps).
Prep	Technician: Go to the Makeup Water Valve (MOV_283E_009) (WY29) (LIC_283E_003).
Prep	Technician: Lift the wires from terminals 2 (TB3-33A) and 3 (TB3-33B).
Prep	Technician: Reconnect the wires to the multimeter in 20 mA range mode.
6.2.02	HMI: Select the Makeup Water Valve - MANUAL. HMI: Does the switch indicate MANUAL?
6.2.03	HMI: Increase the manual setting to 50%. Technician: Is the signal at the valve = 12.0 mA ± 0.2 mA?
6.2.04	HMI: Increase the manual setting to 100%. Technician: Is the signal at the valve = 20.0 mA ± 0.2 mA?
6.2.05	HMI: Decrease the manual setting to 0%. Technician: Is the signal at the valve = 4.0 mA ± 0.2 mA?

6.2.06	Technician: Land the wires back on terminals 2 (TB3-33A) and 3 (TB3-33B). Technician: Are the wires reconnected?
6.2.07	Test Director: Ensure the Makeup Water Valve is set up according to manufacturers instructions. Test Director: Does the Makeup Water Valve appear to be functioning correctly? NO
Prep	HMI: Go to the APPROPRIATE HMI Faceplate.
Prep	HMI: DWG H-2-827237 SH 4 (Ref. for the next steps).
✓Prep	Technician: Go to the Clearwell #1 Level Transmitter (WX20) (LIT_283E_003A).
✓Prep	Technician: Lift the wires from terminals 6 (TB3-FU15) and 3 (TB3-29).
✓6.2.08	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the Clearwell #1 Level = 0 ft ± 1%?
✓6.2.09	Technician: Reset the simulator to 20 mA. HMI: Is the Clearwell #1 Level = 15 ft ± 1%?
✓6.2.10	Technician: Land the wires back on terminals 6 (TB3-FU15) and 3 (TB3-29). Technician: Are the wires reconnected?
6.2.11	Lead Engineer: Verify that the Clearwell #1 Level Transmitter has been commissioned and calibrated. Exception Lead Engineer: Has the Clearwell #1 Level Transmitter has been commissioned and calibrated?
✓Prep	Technician: Go to the Clearwell #2 Level Transmitter (WX21) (LIT_283E_003B).

✓Prep	Technician: Lift the wires from terminals 6 (TB3-FU16) and 3 (TB3-31).	
ok 6.2.12	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the Clearwell #2 Level = 0 ft ± 1%?	
ok 6.2.13	Technician: Reset the simulator to 20 mA. HMI: Is the Clearwell #2 Level = 15 ft ± 1%?	
✓6.2.14	Technician: Land the wires back on terminals 6 (TB3-FU16) and 3 (TB3-31). Technician: Are the wires reconnected?	
6.2.15	Lead Engineer: Verify that the Clearwell #2 Level Transmitter has been commissioned and calibrated. Lead Engineer: Has the Clearwell #2 Level Transmitter has been commissioned and calibrated?	Exception: not calibrated or commissioned
Prep	HMI: Close the APPROPRIATE HMI Faceplate and verify the event log.	

Passing Report

Section MAKEUPATP

LogDate	ID	Tester	Description
5/28/99 12:57:04	6.2.01	GSC	HMI: Is the 283E communication light blinking? [YES]
5/28/99 12:59:20	6.2.02	GSC	HMI: Does the switch indicate MANUAL? [YES]
5/28/99 13:26:38	6.2.03	GSC	Technician: Is the signal at the valve = 12.0 mA ± 0.2 mA? [YES]
5/28/99 13:26:53	6.2.04	GSC	Technician: Is the signal at the valve = 20.0 mA ± 0.2 mA? [YES]
5/28/99 13:27:15	6.2.05	GSC	Technician: Is the signal at the valve = 4.0 mA ± 0.2 mA? [YES]
5/28/99 13:27:54	6.2.06	GSC	Technician: Are the wires reconnected? [YES]
5/28/99 13:30:22	6.2.08	GSC	HMI: Is the Clearwell #1 Level = 0 ft ± 1%? [YES]
5/28/99 13:30:33	6.2.09	GSC	HMI: Is the Clearwell #1 Level = 15 ft ± 1%? [YES]
5/28/99 13:31:49	6.2.10	GSC	Technician: Are the wires reconnected? [YES]
5/28/99 13:33:22	6.2.12	GSC	HMI: Is the Clearwell #2 Level = 0 ft ± 1%? [YES]
5/28/99 13:33:29	6.2.13	GSC	HMI: Is the Clearwell #2 Level = 15 ft ± 1%? [YES]
5/28/99 13:35:14	6.2.14	GSC	Technician: Are the wires reconnected? [YES]

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Exceptions Report

Section MAKEUPATP

LogDate	ID	Tester	RAA	EAA	O	Description
5/28/99 13:29:04	6.2.07	GSC	☒	☐	☐	Test Director: Does the Makeup Water Valve appear to be functioning correctly[No: To be addressed.]
5/28/99 13:32:11	6.2.11	GSC	☒	☐	☐	Lead Engineer: Has the Clearwell #1 Level Transmitter has been [No: To be calibrated/commissioned.]
5/28/99 13:35:30	6.2.15	GSC	☒	☐	☐	Lead Engineer: Has the Clearwell #2 Level Transmitter has been [No: To be calibrated/commissioned.]

6.2.11, 6.2.15 — SETUP & TESTED ACCEPTABLY 6/28/99

6.2.07 — VLU COMMISSIONED AFTER ATP & TESTED ACCEPTABLY TLS 9/23/99

DynCorp Test Director	5/28/99 Date	FDNW Project Manager	5/29/99 Date	FDNW Test Director	5/28/99 Date
Recorder - FDNW	5/28/99 Date	Authorized Inspector -FDH	5/28/99 Date	Witness	6/30/99 Date

5/28/99 14:40:44 14:40:44

6.3 Miscellaneous Pump Instrumentation ATP

6.3.01	HMI: Verify HMI is in communication with the 283E PLC. HMI: Is the 283E communication light blinking?
Prep	HMI: Go to the EAST WTP Faceplate and Pagedown.
Prep	HMI: DWG H-2-827237 SH 1 (Ref. for the next steps).
Prep	Technician: Go to the 8" SW Line Flow Transmitter (WX01) (FIT_283E_201A).
Prep	Technician: Lift the wires from terminals OUT (TB3-FU1) and IN (TB3-1).
6.3.02	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the 8" SW Line Flow = 0 gpm ± 1%?
6.3.03	Technician: Reset the simulator to 20 mA. HMI: Is the 8" SW Line Flow = 2000 gpm ± 1%?
6.3.04	Technician: Land the wires back on terminals OUT (TB3-FU1) and IN (TB3-1). Technician: Are the wires reconnected?
Prep	Technician: Go to the 8" SW Line Transmitter (XIT_283E_201A).
Prep	Technician: Lift the wires from terminals TB1-A/+ (TB3-3) and TB1-A/- (TB3-3A) (WX02) (AI_283E_201A).
6.3.05	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the 8" SW Line pH = 0 pH ± 1%?

6.3.06	Technician: Reset the simulator to 20 mA. HMI: Is the 8" SW Line pH = 14 pH ± 1%?
6.3.07	Technician: Land the wires back on terminals TB1-A/+ (TB3-3) and TB1-A/- (TB3-3A). HMI: Are the wires reconnected?
Prep	Technician: Lift the wires from terminals TB1-B/+ (TB3-FU3) and TB1-B/- (TB3-5) (WX03) (TI_283E_201A).
6.3.08	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the 8" SW Line Temp = 0 deg C ± 1%?
6.3.09	Technician: Reset the simulator to 20 mA. HMI: Is the 8" SW Line Temp = 40 deg C ± 1%?
6.3.10	Technician: Land the wires back on terminals TB1-B/+ (TB3-FU3) and TB1-B/- (TB3-5).
Prep	Technician: Go to the 10" SW Line Flow Transmitter (WX04) (FIT_283E_201B).
Prep	Technician: Lift the wires from terminals OUT (TB3-FU4) and IN (TB3-7).
6.3.11	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the 10" SW Line Flow = 0 gpm ± 1%?
6.3.12	Technician: Reset the simulator to 20 mA. HMI: Is the 10" SW Line Flow = 4000 gpm ± 1%?
6.3.13	Technician: Land the wires back on terminals OUT (TB3-FU4) and IN (TB3-7). Technician: Are the wires reconnected?

Prep	Technician: Go to the 10" SW Line Transmitter (XIT_283E_201B).
Prep	Technician: Lift the wires from terminals A/+ (TB3-FU5) and A/-(TB3-9) (WX05) (AI_283E_201B).
6.3.14	Technician: Reconnect the wires to the simulator and set to 4 mA. Is the 10" SW Line pH = 0 pH ± 1%?
6.3.15	Technician: Reset the simulator to 20 mA. HMI: Is the 10" SW Line pH = 14 pH ± 1%?
6.3.16	Technician: Land the wires back on terminals A/+ (TB3-FU5) and A/-(TB3-9). Technician: Are the wires reconnected?
Prep	Technician: Lift the wires from terminals TB1-B/+ (TB3-FU6) and TB1-B/- (TB3-11) (WX06) (TI_283E_201B).
6.3.17	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the 8" SW Line Temp = 0 deg C ± 1%?
6.3.18	Technician: Reset the simulator to 20 mA. HMI: Is the 8" SW Line Temp = 40 deg C ± 1%?
6.3.19	Technician: Land the wires back on terminals TB1-B/+ (TB3-FU6) and TB1-B/- (TB3-11). Technician: Are the wires reconnected?
Prep	HMI: DWG H-2-827237 SH 3 (Ref. for the next steps).
Prep	Technician: Go to the 8" SW Line Pressure Transmitter (WX18) (PIT_283E_003).

Prep	Technician: Lift the wires from the plus (TB4-1) and minus (TB4-2) terminals.
6.3.20	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the SW 8" line pressure = 0 psig ± 1%?
6.3.21	Technician: Reset the simulator to 20 mA. HMI: Is the SW 8" line pressure = 200 psig ± 1%?
6.3.22	Technician: Land the wires back on the plus (TB4-1) and minus (TB4-2) terminals. Technician: Are the wires reconnected?
Prep	Technician: Go to the VFD-1 Cabinet (WY14) (PIC_283E_003).
Prep	Technician: Lift the wires from terminals TB1-12 (TB3-19A) and TB1-11 (TB3-19B).
Prep	Technician: Reconnect the wires to the multimeter in ADC mode and set to 20 mA range.
Prep	Operator: Go to PUMP 3 - REMOTE at MCC
6.3.23	HMI: Go to PUMP 3 - MANUAL. Set the SW Pump No. 3 to 0 %. Technician: Does the multimeter display ~~4~~ 0 mA ± 1%? AS
6.3.24	HMI: Set the SW Pump No. 3 to 100 %. Technician: Does the multimeter display 20 mA ± 1%?
6.3.25	Technician: Land the wires back on terminals TB1-12 (TB3-19A) and TB1-11 (TB3-19B). Technician: Are the wires reconnected?

Prep	Technician: Go to the 10" SW Line Pressure Transmitter (WY19) (PIT_283E_006).
Prep	Technician: Lift the wires from the plus (TB4-1) and minus (TB4-2) terminals.
6.3.26	Technician: Reconnect the wires to the simulator and set to 4 mA. HMI: Is the SW 10" line pressure = 0 psig ± 1%?
6.3.27	Technician: Reset the simulator to 20 mA. HMI: Is the SW 10" line pressure = 200 psig ± 1%?
6.3.28	Technician: Land the wires back on the plus (TB4-1) and minus (TB4-2) terminals. Technician: Are the wires reconnected?
Prep	Technician: Go to the VFD-2 Cabinet (WY15) (PIC_283E_006).
Prep	Technician: Lift the wires from terminals TB1-12 (TB3-21A) and TB1-11 (TB3-21B).
Prep	Technician: Reconnect the wires to the multimeter in ADC mode and set to 20 mA range.
Prep	Operator: Go to PUMP 6 - REMOTE at MCC
6.3.29	HMI: Go to PUMP 6 - MANUAL. Set the SW Pump No. 6 to 0 %. Technician: Does the multimeter display ~~4~~ 0 mA ± 1%? TLS
6.3.30	HMI: Set the SW Pump No. 6 to 100 %. Technician: Does the multimeter display 20 mA ± 1%?

6.3.31	Technician: Land the wires back on terminals TB1-12 (TB3-21A) and TB1-11 (TB3-21B). Technician: Are the wires reconnected?
Prep	HMI: Close the EAST WTP Faceplate and verify event log.

Passing Report

Section PUMPINSTMATP

LogDate	ID	Tester	Description
5/28/99 13:38:16	6.3.01	GSC	HMI: Is the 283E communication light blinking? [YES]
5/28/99 13:40:23	6.3.02	GSC	HMI: Is the 8" SW Line Flow = 0 gpm ± 1%? [YES]
5/28/99 13:40:36	6.3.03	GSC	HMI: Is the 8" SW Line Flow = 2000 gpm ± 1%? [YES]
5/28/99 13:42:10	6.3.04	GSC	Technician: Are the wires reconnected? [YES]
5/28/99 13:42:57	6.3.05	GSC	HMI: Is the 8" SW Line pH = 0 pH ± 1%? [YES]
5/28/99 13:43:05	6.3.06	GSC	HMI: Is the 8" SW Line pH = 14 pH ± 1%? [YES]
5/28/99 13:45:12	6.3.07	GSC	HMI: Are the wires reconnected? [YES]
5/28/99 13:45:46	6.3.08	GSC	HMI: Is the 8" SW Line Temp = 0 deg C ± 1%? [YES]
5/28/99 13:45:54	6.3.09	GSC	HMI: Is the 8" SW Line Temp = 40 deg C ± 1%? [YES]
5/28/99 13:47:26	6.3.10	GSC	[YES]
5/28/99 13:48:25	6.3.11	GSC	HMI: Is the 10" SW Line Flow = 0 gpm ± 1%? [YES]
5/28/99 13:48:33	6.3.12	GSC	HMI: Is the 10" SW Line Flow = 4000 gpm ± 1%? [YES]
5/28/99 13:49:53	6.3.13	GSC	Technician: Are the wires reconnected? [YES]
5/28/99 13:50:40	6.3.14	GSC	Is the 10" SW Line pH = 0 pH ± 1%? [YES]
5/28/99 13:50:48	6.3.15	GSC	HMI: Is the 10" SW Line pH = 14 pH ± 1%? [YES]
5/28/99 13:51:39	6.3.16	GSC	Technician: Are the wires reconnected? [YES]
5/28/99 13:52:03	6.3.17	GSC	HMI: Is the 8" SW Line Temp = 0 deg C ± 1%? [YES]
5/28/99 13:52:10	6.3.18	GSC	HMI: Is the 8" SW Line Temp = 40 deg C ± 1%? [YES]
5/28/99 13:53:33	6.3.19	GSC	Technician: Are the wires reconnected? [YES]
5/28/99 13:58:22	6.3.20	GSC	HMI: Is the SW 8" line pressure = 0 psig ± 1%? [YES]
5/28/99 13:59:14	6.3.21	GSC	HMI: Is the SW 8" line pressure = 200 psig ± 1%? [YES]

DynCorp Test Director	5/29/99 Date	FDNW Project Manager	5/29/99 Date
FDNW Test Director	5/28/99 Date	Recorder - FDNW	5/28/99 Date
Authorized Inspector - FDH	5/28/99 Date	Witness	6/3/99 Date

5/28/99 14:02:13	6.3.22	GSC	Technician: Are the wires reconnected? [YES]
5/28/99 14:11:23	6.3.23	GSC	Technician: Does the multimeter display 4 mA ± 1%? [YES]
5/28/99 14:11:55	6.3.24	GSC	Technician: Does the multimeter display 20 mA ± 1%? [YES]
5/28/99 14:16:38	6.3.25	GSC	Technician: Are the wires reconnected? [YES]
5/28/99 14:28:59	6.3.26	GSC	HMI: Is the SW 10" line pressure = 0 psig ± 1%? [YES]
5/28/99 14:29:09	6.3.27	GSC	HMI: Is the SW 10" line pressure = 200 psig ± 1%? [YES]
5/28/99 14:32:07	6.3.28	GSC	Technician: Are the wires reconnected? [YES]
5/28/99 14:34:50	6.3.30	GSC	Technician: Does the multimeter display 20 mA ± 1%? [YES]
5/28/99 14:39:56	6.3.31	GSC	Technician: Are the wires reconnected? [YES]

DynCorp Test Director	5/29/99 Date	FDNW Project Manager	5/29/99 Date
FDNW Test Director	5/28/99 Date	Recorder - FDNW	5/28/99 Date
Authorized Inspector - FDH	5/28/99 Date	Witness	6/30/99 Date

Exceptions Report

Section PUMPINSTMATP

LogDate	ID	Tester	RAA	EAA	O	Description
5/28/99 14:34:34	6.3.29	GSC	☐	☒	☐	Technician: Does the multimeter display 4 mA ± 1%?[No: Rescaled to match Pump (0 mA). Same for]

6.3.29 SEE EXCEPTIONS SECTION 2.9. PUMP CONTROLS ON 0-20 MA VS 4-20 MA, LOGIC WAS CHANGED PRIOR TO TEST BUT NOT ATP. THE TEST SHOULD READ "0".

TLS
6/28/99

DynCorp Test Director	5/28/99 Date	FDNW Project Manager	5/29/99 Date	FDNW Test Director	5/28/99 Date
Recorder - FDNW	5/28/99 Date	Authorized Inspector -FDH	Date	Witness	6/3/99 Date

5/28/99 14:42:00 14:42:00

6.4 Sanitary Water Pump 1 ATP

6.4.01	HMI: Verify HMI is in communication with the 283E PLC. HMI: Is the 283E communication light blinking?
Prep	HMI: Testing SW PUMP 1
6.4.02	Test Director: Ensure applicable portions of MISC PUMP INSTRUMENTATION test been run Test Director: Were the test sections completed successfully?
Prep	HMI: Go to the SW PUMP 1 AND 2 Faceplate.
6.4.03	Technician: Ensure motor leads for SW Pump 1 connected Technician: Are the motor leads for SW Pump 1 connected?
6.4.04	Operator: Verify that all other SW pump disconnects are open. Operator: Are all SW pump disconnects open except for SW pumps being tested?
Prep	Operator: Close main disconnect of MCC2.
6.4.05	Operator: Close the disconnect on SW Pump 1 motor starter. Technician: Is the SW Pump 1 motor starter control Voltage transformer = 120VAC ± 5%?
Prep	HMI: Have another test operator go to the SW Pump 1 local control station in the basement.
6.4.06	Operator: Place Hand/Off/Auto switch on motor starter cubicle face in HAND. HMI: Is the LOCAL CONTROL indicator flashing yellow?

6.4.07	Operator: Push the SW Pump 1 Local Start pushbutton (PB). Operator: Did the SW Pump 1 START and the SW Pump 1 ON light illuminate? HMI: Pump 1 ON?
6.4.08	Operator: Push SW Pump 1 local Emergency Stop PB. Operator: Did SW pump 1 STOP? HMI: Pump 1 OFF?
6.4.09	Operator: Push the SW Pump 1 motor starter Start PB. Operator: Did the SW Pump 1 motor starter remain de-energized?
6.4.10	Operator: Pull out (reset) the SW Pump 1 local Emergency Stop PB. Operator: Did the SW Pump 1 motor starter remain de-energized?
6.4.11	Operator: Push the SW Pump 1 motor starter Start PB again. Operator: Did SW Pump 1 START?
6.4.12	Operator: Push the SW Pump 1 motor starter Stop PB. Operator: Did SW Pump 1 STOP?
6.4.13	Operator: Place Hand/Off/Auto switch on SW Pump 1 motor starter cubicle face in AUTO. HMI: Is the LOCAL CONTROL indicator WHITE?
Prep	HMI: Go to the SW PUMP 1 & 2 Faceplate.
6.4.14	HMI: Put the Manual-Off-Auto switch in MANUAL and click PUMP 1 - START. Operator: Did SW Pump 1 START?
6.4.15	Operator: Push the SW Pump 1 local Emergency Stop PB. Operator: Did SW Pump 1 STOP?
6.4.16	Operator Pull out (reset) the SW Pump 1 local Emergency Stop PB. Operator: Did the SW Pump 1 motor starter remain de-energized?

6.4.17	Operator: Push the SW Pump 1 local Start PB. Operator: Did the SW Pump 1 motor starter remain de-energized?
6.4.18	HMI: Click PUMP 1 - START Operator: Did SW Pump 1 START?
6.4.19	HMI: Click PUMP 1 - STOP Operator: Did SW Pump 1 STOP?
6.4.20	Operator: Place the SW Pump 1 Hand/Off/Auto switch on motor starter cubicle face in Off position. HMI: Is the LOCAL CONTROL indicator flashing yellow?
6.4.21	HMI: Click PUMP 1 - START Operator: Did the SW Pump 1 motor starter remain de-energized?
6.4.22	Operator: Push the SW Pump 1 local Start PB. HMI: Did the SW Pump 1 motor starter remain de-energized?
Prep	HMI: Close PUMP 1 AND 2 FACEPLATE and verify event log.

Passing Report

Section PUMP1ATP

LogDate	ID	Tester	Description
5/28/99 18:16:18	6.4.01	GSC	HMI: Is the 283E communication light blinking? [YES]
5/28/99 18:16:27	6.4.02	GSC	Test Director: Were the test sections completed successfully? [YES]
5/28/99 18:17:31	6.4.04	GSC	Operator: Are all SW pump disconnects open except for SW pumps being tested? [YES]
5/28/99 18:19:04	6.4.06	GSC	HMI: Is the LOCAL CONTROL indicator flashing yellow? [YES]
5/28/99 18:19:18	6.4.07	GSC	Operator: Did the SW Pump 1 START and the SW Pump 1 ON light illuminate? HMI: Pump 1 ON? [YES]
5/28/99 18:19:31	6.4.08	GSC	Operator: Did SW pump 1 STOP? HMI: Pump 1 OFF? [YES]
5/28/99 18:19:51	6.4.09	GSC	Operator: Did the SW Pump 1 motor starter remain de-energized? [YES]
5/28/99 18:20:07	6.4.10	GSC	Operator: Did the SW Pump 1 motor starter remain de-energized? [YES]
5/28/99 18:20:19	6.4.11	GSC	Operator: Did SW Pump 1 START? [YES]
5/28/99 18:20:33	6.4.12	GSC	Operator: Did SW Pump 1 STOP? [YES]
5/28/99 18:20:50	6.4.13	GSC	HMI: Is the LOCAL CONTROL indicator WHITE? [YES]
5/28/99 18:21:12	6.4.14	GSC	Operator: Did SW Pump 1 START? [YES]
5/28/99 18:21:26	6.4.15	GSC	Operator: Did SW Pump 1 STOP? [YES]
5/28/99 18:21:38	6.4.16	GSC	Operator: Did the SW Pump 1 motor starter remain de-energized? [YES]
5/28/99 18:21:49	6.4.17	GSC	Operator: Did the SW Pump 1 motor starter remain de-energized? [YES]
5/28/99 18:22:05	6.4.18	GSC	Operator: Did SW Pump 1 START? [YES]
5/28/99 18:22:20	6.4.19	GSC	Operator: Did SW Pump 1 STOP? [YES]
5/28/99 18:22:34	6.4.20	GSC	HMI: Is the LOCAL CONTROL indicator flashing yellow? [YES]
5/28/99 18:22:46	6.4.21	GSC	Operator: Did the SW Pump 1 motor starter remain de-energized? [YES]
5/28/99 18:22:59	6.4.22	GSC	HMI: Did the SW Pump 1 motor starter remain de-energized? [YES]

DynCorp Test Director	Date 5/29/99	FDNW Project Manager	Date 5/29/99
FDNW Test Director	Date 5/28/99	Recorder - FDNW	Date 5/28/99
Authorized Inspector - FDH	Date 5/28/99	Witness	Date 6/3/99

Exceptions Report

Section PUMP1ATP

LogDate	ID	Tester	RAA	EAA	O	Description
5/28/99 18:17:14	6.4.03	GSC	☐	☒	☐	Technician: Are the motor leads for SW Pump 1 connected?[No: Not connected]
5/28/99 18:18:44	6.4.05	GSC	☐	☒	☐	Technician: Is the SW Pump 1 motor starter control Voltage transfor[No: Removed step - not testing]

6.4.03
6.4.05] SAME DISPOSITION AS FOR SECTION 2.10

6/28/99
RS

DynCorp Test Director	5/28/99 Date	FDNW Project Manager	5/29/99 Date	FDNW Test Director	5/28/99 Date
Recorder - FDNW	5/28/99 Date	Authorized Inspector -FDH	5/28/99 Date	Witness	6/28/99 Date

5/28/99 19:11:55 19:11:55

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6.5 Sanitary Water Pump 2 ATP

6.5.01	HMI: Verify HMI is in communication with the 283E PLC. HMI: Is the 283E communication light blinking?
Prep	HMI: Testing SW PUMP 2
6.5.02	Test Director: Ensure applicable portions of MISC PUMP INSTRUMENTATION test been run Test Director: Were the test sections completed successfully?
Prep	HMI: Go to the SW PUMP 1 AND 2 Faceplate.
6.5.03	Technician: Ensure motor leads for SW Pump 2 connected Technician: Are the motor leads for SW Pump 2 connected?
6.5.04	Operator: Verify that all other SW pump disconnects are open. Operator: Are all SW pump disconnects open except for SW pumps being tested?
Prep	Operator: Close main disconnect of MCC2.
6.5.05	Operator: Close the disconnect on SW Pump 2 motor starter. Technician: Is the SW Pump 2 motor starter control Voltage transformer = 120VAC ± 5%?
Prep	HMI: Have another test operator go to the SW Pump 2 local control station in the basement.
6.5.06	Operator: Place Hand/Off/Auto switch on motor starter cubicle face in HAND. HMI: Is the LOCAL CONTROL indicator flashing yellow?

6.5.07	Operator: Push the SW Pump 2 Local Start pushbutton (PB). Operator: Did the SW Pump 2 START and the SW Pump 2 ON light illuminate? HMI: Pump 2 ON?
6.5.08	Operator: Push SW Pump 2 local Emergency Stop PB. Operator: Did SW pump 2 STOP? HMI: Pump 2 OFF?
6.5.09	Operator: Push the SW Pump 2 motor starter Start PB. Operator: Did the SW Pump 2 motor starter remain de-energized?
6.5.10	Operator: Pull out (reset) the SW Pump 2 local Emergency Stop PB. Operator: Did the SW Pump 2 motor starter remain de-energized?
6.5.11	Operator: Push the SW Pump 2 motor starter Start PB again. Operator: Did SW Pump 2 START?
6.5.12	Operator: Push the SW Pump 2 motor starter Stop PB. Operator: Did SW Pump 2 STOP?
6.5.13	Operator: Place Hand/Off/Auto switch on SW Pump 2 motor starter cubicle face in AUTO. HMI: Is the LOCAL CONTROL indicator WHITE?
Prep	HMI: Go to the SW PUMP 2 & 2 Faceplate.
6.5.14	HMI: Put the Manual-Off-Auto switch in MANUAL and click PUMP 2 - START. Operator: Did SW Pump 2 START?
6.5.15	Operator: Push the SW Pump 2 local Emergency Stop PB. Operator: Did SW Pump 2 STOP?
6.5.16	Operator Pull out (reset) the SW Pump 2 local Emergency Stop PB. Operator: Did the SW Pump 2 motor starter remain de-energized?

6.5.17	Operator: Push the SW Pump 2 local Start PB. Operator: Did the SW Pump 2 motor starter remain de-energized?
6.5.18	HMI: Click PUMP 2 - START Operator: Did SW Pump 2 START?
6.5.19	HMI: Click PUMP 2 - STOP Operator: Did SW Pump 2 STOP?
6.5.20	Operator: Place the SW Pump 2 Hand/Off/Auto switch on motor starter cubicle face in Off position. HMI: Is the LOCAL CONTROL indicator flashing yellow?
6.5.21	HMI: Click PUMP 2 - START Operator: Did the SW Pump 2 motor starter remain de-energized?
6.5.22	Operator: Push the SW Pump 2 local Start PB. HMI: Did the SW Pump 2 motor starter remain de-energized?
Prep	HMI: Close PUMP 1 AND 2 FACEPLATE and verify event log.

Passing Report

Section PUMP2ATP

LogDate	ID	Tester	Description
5/28/99 18:24:45	6.5.01	GSC	HMI: Is the 283E communication light blinking? [YES]
5/28/99 18:24:52	6.5.02	GSC	Test Director: Were the test sections completed successfully? [YES]
5/28/99 18:25:29	6.5.04	GSC	Operator: Are all SW pump disconnects open except for SW pumps being tested? [YES]
5/28/99 18:25:51	6.5.05	GSC	Technician: Is the SW Pump 2 motor starter control Voltage transformer = 120VAC ± 5%? [YES] * NO EXCEPTION
5/28/99 18:26:55	6.5.06	GSC	HMI: Is the LOCAL CONTROL indicator flashing yellow? [YES]
5/28/99 18:29:10	6.5.08	GSC	Operator: Did SW pump 2 STOP? HMI: Pump 2 OFF? [YES]
5/28/99 18:29:22	6.5.09	GSC	Operator: Did the SW Pump 2 motor starter remain de-energized? [YES]
5/28/99 18:29:33	6.5.10	GSC	Operator: Did the SW Pump 2 motor starter remain de-energized? [YES]
5/28/99 18:39:46	6.5.11	GSC	Operator: Did SW Pump 2 START? [YES]
5/28/99 18:40:08	6.5.12	GSC	Operator: Did SW Pump 2 STOP? [YES]
5/28/99 18:40:29	6.5.13	GSC	HMI: Is the LOCAL CONTROL indicator WHITE? [YES]
5/28/99 19:48:22	6.5.14	GSC	Operator: Did SW Pump 2 START? [YES]
5/28/99 19:49:19	6.5.15	GSC	Operator: Did SW Pump 2 STOP? [YES]
5/28/99 19:49:32	6.5.16	GSC	Operator: Did the SW Pump 2 motor starter remain de-energized? [YES]
5/28/99 19:49:45	6.5.17	GSC	Operator: Did the SW Pump 2 motor starter remain de-energized? [YES]
5/28/99 19:50:02	6.5.18	GSC	Operator: Did SW Pump 2 START? [YES]
5/28/99 19:50:15	6.5.19	GSC	Operator: Did SW Pump 2 STOP? [YES]
5/28/99 19:50:43	6.5.20	GSC	HMI: Is the LOCAL CONTROL indicator flashing yellow? [YES]
5/28/99 19:50:59	6.5.21	GSC	Operator: Did the SW Pump 2 motor starter remain de-energized? [YES]
5/28/99 19:51:13	6.5.22	GSC	HMI: Did the SW Pump 2 motor starter remain de-energized? [YES]

DynCorp Test Director	5/29/99 Date	FDNW Project Manager	5/29/99 Date
FDNW Test Director	5/28/99 Date	Recorder - FDNW	5/28/99 Date
Authorized Inspector - FDH	5/28/99 Date	Witness	6/3/99 Date

Exceptions Report

Section PUMP2ATP

LogDate	ID	Tester	RAA	EAA	O	Description
5/28/99 18:25:17	6.5.03	GSC	☐	☒	☐	Technician: Are the motor leads for SW Pump 2 connected?[No: Removed step - not testing]
5/28/99 18:28:54	6.5.07	GSC	☒	☐	☐	Operator: Did the SW Pump 2 START and the SW Pump 2 O[No: Pump started but no power to MCC2 light]

6.5.03 - SAME DISPOSITION AS FOR SECTION 2.10 TLS 6/28/99

6.5.07 - BULB REPLACED AFTER ATP.

EXCEPTION: 6.5.05, DISPOSED SAME AS FOR SECTION 2.10 TLS

Thomas Sunest	5/29/99	Brian C Harrow	5/29/99	Gregory J Larsen	5/28/99
DynCorp Test Director	Date	FDNW Project Manager	Date	FDNW Test Director	Date
W.T.	5/28/99	[illegible]	5/28/99	[illegible]	6/3/99
Recorder - FDNW	Date	Authorized Inspector -FDH	Date	Witness	Date

5/28/99 19:51:50 19:51:50 Page 1 of 1

6.6 Sanitary Water Pump 3 ATP

6.6.01	HMI: Ensure HMI is in communication with the 283E PLC. HMI: Is the 283E communication light blinking?
6.6.02	Test Director: Ensure applicable portions of MISC PUMP INSTRUMENTATION test been run Test Director: Were the test sections completed successfully?
Prep	Testing SW PUMP 3 motor Starter and VFD controls
Prep	HMI: Go to the SW PUMP 3 Faceplate.
6.6.03	Technician: Ensure motor leads for SW PUMP 3 disconnected Technician: Are the motor leads for SW PUMP 3 disconnected?
Prep	Operator: Close main disconnect of MCC2.
6.6.04	Operator: Close the disconnect on SW PUMP 3 motor Starter. Operator: Disconnect in ON position?
6.6.05	Operator: Ensure that all other SW pump disconnects are open. Operator: Are all SW pump disconnects open except for SW pumps being tested?
6.6.06	Operator: At the SW PUMP 3 MCC cubicle, place Local/Remote switch in the REMOTE position. HMI: Is the LOCAL CONTROL indicator WHITE?
Prep	Test Director: Have another test operator go to the SW PUMP 3 local control station in the basement.

6.6.07	~~Operator: At VFD-1, push AUTO and AUTO REF buttons~~ ~~Operator: Did AUTO and AUTO REF lights come on?~~	Delete (NOT REQUIRED) Click on Stop instead 5/28/99
6.6.08	HMI: Place the Auto-Man switch in MANUAL and set output = 0%. HMI: Is the MANUAL switch green?	
6.6.09	HMI: Click PUMP 3 - START Operator: Did SW PUMP 3 START? HMI: PUMP 3 ON?	
6.6.10	HMI: Increase PUMP 3 SPEED to 50% Operator: Is PUMP 3 running 50% of operating range?	
6.6.11	HMI: Click PUMP 3 - STOP Operator: Did SW PUMP 3 STOP? HMI: PUMP 3 OFF?	
6.6.12	Operator: Push and release SW PUMP 3 Local START Operator: Did SW PUMP 3 REMAIN OFF?	
6.6.13	HMI: Click PUMP 3 - START Operator: Did SW PUMP 3 START?	
6.6.14	Operator: Push and release SW PUMP 3 Local STOP Operator: Did SW PUMP 3 STOP? HMI: PUMP 3 OFF?	
6.6.15	HMI: Click PUMP 3 - START Operator: Did SW PUMP 3 REMAIN OFF?	
6.6.16	Operator: Push and release SW PUMP 3 Local START Operator: Did SW PUMP 3 REMAIN OFF?	
6.6.17	~~Operator: At VFD-1, press OFF, then AUTO on keypad~~ ~~Operator: Are AUTO and AUTO REF lights ON?~~	Delete (Not Required) Click on Stop instead

6.6.18	Operator: At the SW PUMP 3 MCC cubicle, place Local/Remote switch in the LOCAL position. HMI: Is the LOCAL CONTROL indicator FLASHING YELLOW?
6.6.19	Operator: Push and release SW PUMP 3 Local START Operator: Is PUMP 3 running? HMI: PUMP 3 ON?
6.6.20	HMI: Click PUMP 3 - STOP Operator: Does PUMP 3 remain ON?
6.6.21	Operator: Push and release SW PUMP 3 Local STOP Operator: Did PUMP 3 STOP? HMI: PUMP 3 OFF?
6.6.22	HMI: Click PUMP 3 - START Operator: Did SW PUMP 3 REMAIN OFF?
6.6.23	Operator: Push and release SW PUMP 3 Local START Operator: Did SW PUMP 3 REMAIN OFF?
6.6.24	~~Operator: At VFD-1, press OFF, then AUTO on keypad~~ ~~Operator: Are AUTO and AUTO REF lights ON?~~ click on Stop instead
Prep	HMI: Close PUMP 3 FACEPLATE and verify event log.

Passing Report

Section PUMP3ATP

LogDate	ID	Tester	Description
5/28/99 15:10:36	6.6.01	GSC	HMI: Is the 283E communication light blinking? [YES]
5/28/99 15:10:43	6.6.02	GSC	Test Director: Were the test sections completed successfully? [YES]
5/28/99 15:11:25	6.6.03	GSC	Technician: Are the motor leads for SW PUMP 3 disconnected? [YES]
5/28/99 15:12:01	6.6.04	GSC	Operator: Disconnect in ON position? [YES]
5/28/99 15:12:24	6.6.05	GSC	Operator: Are all SW pump disconnects open except for SW pumps being tested? [YES]
5/28/99 15:12:55	6.6.06	GSC	HMI: Is the LOCAL CONTROL indicator WHITE? [YES]
5/28/99 15:14:53	6.6.07	GSC	Operator: Did AUTO and AUTO REF lights come on? [YES]
5/28/99 15:15:04	6.6.08	GSC	HMI: Is the MANUAL switch green? [YES]
5/28/99 15:15:29	6.6.09	GSC	Operator: Did SW PUMP 3 START? HMI: PUMP 3 ON? [YES]
5/28/99 15:15:59	6.6.10	GSC	Operator: Is PUMP 3 running 50% of operating range? [YES]
5/28/99 15:16:28	6.6.11	GSC	Operator: Did SW PUMP 3 STOP? HMI: PUMP 3 OFF? [YES]
5/28/99 15:16:51	6.6.12	GSC	Operator: Did SW PUMP 3 REMAIN OFF? [YES]
5/28/99 15:16:58	6.6.13	GSC	Operator: Did SW PUMP 3 START? [YES]
5/28/99 15:17:20	6.6.14	GSC	Operator: Did SW PUMP 3 STOP? HMI: PUMP 3 OFF? [YES]
5/28/99 15:17:36	6.6.15	GSC	Operator: Did SW PUMP 3 REMAIN OFF? [YES]
5/28/99 15:17:51	6.6.16	GSC	Operator: Did SW PUMP 3 REMAIN OFF? [YES]
5/28/99 15:18:10	6.6.17	GSC	Operator: Are AUTO and AUTO REF lights ON? [YES]
5/28/99 15:18:35	6.6.18	GSC	HMI: Is the LOCAL CONTROL indicator FLASHING YELLOW? [YES]
5/28/99 15:18:54	6.6.19	GSC	Operator: Is PUMP 3 running? HMI: PUMP 3 ON? [YES]
5/28/99 15:19:10	6.6.20	GSC	Operator: Does PUMP 3 remain ON? [YES]

Thom Lust	5/29/99	Brian C. Hanan	5/29/99
DynCorp Test Director	Date	FDNW Project Manager	Date
Gregory J. Carpenter	5/28/99	Willie H. Thomas	5/28/99
FDNW Test Director	Date	Recorder - FDNW	Date
T. R. Clarke	5/28/99	[illegible]	6/30/99
Authorized Inspector - FDH	Date	Witness	Date

5/28/99 15:19:32	6.6.21	GSC	Operator: Did PUMP 3 STOP? HMI: PUMP 3 OFF? [YES]
5/28/99 15:20:11	6.6.22	GSC	Operator: Did SW PUMP 3 REMAIN OFF? [YES]
5/28/99 15:20:27	6.6.23	GSC	Operator: Did SW PUMP 3 REMAIN OFF? [YES]
5/28/99 15:20:47	6.6.24	GSC	Operator: Are AUTO and AUTO REF lights ON? [YES]

DynCorp Test Director	5/29/99 Date	FDNW Project Manager	5/29/99 Date
FDNW Test Director	5/28/99 Date	Recorder - FDNW	5/28/99 Date
Authorized Inspector - FDH	5/28/99 Date	Witness	6/30/99 Date

Exceptions Report

Section SW PUMP 3 ATP (6.6)

LogDate	ID	Tester	RAA	EAA	O	Description
			☒	☒	☐	

NOT LOGGED: STEP 6.6.17, 6.6.24 NOT PERFORMED. DETERMINED TO NOT BE NECESSARY. CREATES DESCREPANCY BETWEEN 200W & 200TE PUMP 3 & 6 TEST LOGIC. BOTH AREAS CONTROL AS THEY SHOULD. TO BE RESOLVED BY PRINT REVIEW & RETEST OF PUMPS, BY OPERATIONS
RS 5/29/99

Thomas Sewart	5/29/99	Brian C. Hanson	5/29/99	Gregory S. Carpenter	5/28/99
DynCorp Test Director	Date	FDNW Project Manager	Date	FDNW Test Director	Date
William Y. Thomas	5/28/99	G. B. Clarke	5/28/99	[illegible]	6/3/99
Recorder - FDNW	Date	Authorized Inspector -FDH	Date	Witness	Date

5/28/99 15:21:40 15:21:40 Page 1 of 1

6.7 Sanitary Water Pump 6 ATP

6.7.01	HMI: Ensure HMI is in communication with the 283E PLC. HMI: Is the 283E communication light blinking?
6.7.02	Test Director: Ensure applicable portions of MISC PUMP INSTRUMENTATION test been run Test Director: Were the test sections completed successfully?
Prep	Testing SW PUMP 6 motor Starter and VFD controls
Prep	HMI: Go to the SW PUMP 6 Faceplate.
2.7.03	Technician: Ensure motor leads for SW PUMP 6 disconnected Technician: Are the motor leads for SW PUMP 6 disconnected?
Prep	Operator: Close main disconnect of MCC2.
6.7.04	Operator: Close the disconnect on SW PUMP 6 motor Starter. Operator: Disconnect in ON position?
6.7.05	Operator: Ensure that all other SW pump disconnects are open. Operator: Are all SW pump disconnects open except for SW pumps being tested?
6.7.03	Operator: At the SW PUMP 6 MCC cubicle, place Local/Remote switch in the REMOTE position. HMI: Is the LOCAL CONTROL indicator WHITE?
Prep	Test Director: Have another test operator go to the SW PUMP 6 local control station in the basement.

6.7.07	~~Operator: At VFD-2, push AUTO and AUTO REF buttons~~ ~~Operator: Did AUTO and AUTO REF lights come on?~~	Click on Stop instead
6.7.08	HMI: Place the Auto-Man switch in MANUAL and set output = 0%. HMI: Is the MANUAL switch green?	
6.7.09	HMI: Click PUMP 6 - START Operator: Did SW PUMP 6 START? HMI: PUMP 6 ON?	
6.7.10	HMI: Increase PUMP 6 SPEED to 50% Operator: Is PUMP 6 running 50% of operating range?	
6.7.11	HMI: Click PUMP 6 - STOP Operator: Did SW PUMP 6 STOP? HMI: PUMP 6 OFF?	
6.7.12	Operator: Push and release SW PUMP 6 Local START Operator: Did SW PUMP 6 REMAIN OFF?	
6.7.13	HMI: Click PUMP 6 - START Operator: Did SW PUMP 6 START?	
6.7.14	Operator: Push and release SW PUMP 6 Local STOP Operator: Did SW PUMP 6 STOP? HMI: PUMP 6 OFF?	
6.7.15	HMI: Click PUMP 6 - START Operator: Did SW PUMP 6 REMAIN OFF?	
6.7.16	Operator: Push and release SW PUMP 6 Local START Operator: Did SW PUMP 6 REMAIN OFF?	
6.7.17	~~Operator: At VFD-2, press OFF, then AUTO on keypad~~ ~~Operator: Are AUTO and AUTO REF lights ON?~~	Click on Stop instead

6.7.18	Operator: At the SW PUMP 6 MCC cubicle, place Local/Remote switch in the LOCAL position. HMI: Is the LOCAL CONTROL indicator FLASHING YELLOW?
6.7.19	Operator: Push and release SW PUMP 6 Local START Operator: Is PUMP 6 running? HMI: PUMP 6 ON?
6.7.20	HMI: Click PUMP 6 - STOP Operator: Does PUMP 6 remain ON?
6.7.21	Operator: Push and release SW PUMP 6 Local STOP Operator: Did PUMP 6 STOP? HMI: PUMP 6 OFF?
6.7.22	HMI: Click PUMP 6 - START Operator: Did SW PUMP 6 REMAIN OFF?
6.7.23	Operator: Push and release SW PUMP 6 Local START Operator: Did SW PUMP 6 REMAIN OFF?
6.7.24	~~Operator: At VFD-2, press OFF, then AUTO on keypad~~ ~~Operator: Are AUTO and AUTO REF lights ON?~~ Click on Stop Instead
Prep	HMI: Close PUMP 6 FACEPLATE and verify event log.

Passing Report

Section PUMP6ATP

LogDate	ID	Tester	Description
5/28/99 15:31:42	6.7.01	GSC	HMI: Is the 283E communication light blinking? [YES]
5/28/99 15:31:47	6.7.02	GSC	Test Director: Were the test sections completed successfully? [YES]
5/28/99 15:32:24	2.7.03	GSC	Technician: Are the motor leads for SW PUMP 6 disconnected? [YES]
5/28/99 15:32:34	6.7.04	GSC	Operator: Disconnect in ON position? [YES]
5/28/99 15:33:03	6.7.05	GSC	Operator: Are all SW pump disconnects open except for SW pumps being tested? [YES]
5/28/99 15:33:18	6.7.03	GSC	HMI: Is the LOCAL CONTROL indicator WHITE? [YES]
5/28/99 15:33:56	6.7.07	GSC	Operator: Did AUTO and AUTO REF lights come on? [YES]
5/28/99 15:34:07	6.7.08	GSC	HMI: Is the MANUAL switch green? [YES]
5/28/99 15:34:21	6.7.09	GSC	Operator: Did SW PUMP 6 START? HMI: PUMP 6 ON? [YES]
5/28/99 15:34:37	6.7.10	GSC	Operator: Is PUMP 6 running 50% of operating range? [YES]
5/28/99 15:34:59	6.7.11	GSC	Operator: Did SW PUMP 6 STOP? HMI: PUMP 6 OFF? [YES]
5/28/99 15:35:16	6.7.12	GSC	Operator: Did SW PUMP 6 REMAIN OFF? [YES]
5/28/99 15:36:24	6.7.13	GSC	Operator: Did SW PUMP 6 START? [YES]
5/28/99 15:36:42	6.7.14	GSC	Operator: Did SW PUMP 6 STOP? HMI: PUMP 6 OFF? [YES]
5/28/99 15:37:02	6.7.15	GSC	Operator: Did SW PUMP 6 REMAIN OFF? [YES]
5/28/99 15:37:15	6.7.16	GSC	Operator: Did SW PUMP 6 REMAIN OFF? [YES]
5/28/99 15:37:44	6.7.17	GSC	Operator: Are AUTO and AUTO REF lights ON? [YES]
5/28/99 15:37:54	6.7.18	GSC	HMI: Is the LOCAL CONTROL indicator FLASHING YELLOW? [YES]
5/28/99 15:38:10	6.7.19	GSC	Operator: Is PUMP 6 running? HMI: PUMP 6 ON? [YES]
5/28/99 15:38:22	6.7.20	GSC	Operator: Does PUMP 6 remain ON? [YES]

DynCorp Test Director	Date 5/29/99	FDNW Project Manager	Date 5/29/99
FDNW Test Director	Date 5/28/99	Recorder - FDNW	Date 5/28/99
Authorized Inspector - FDH	Date 5/28/99	Witness	Date 6/30/99

5/28/99 15:38:41	6.7.21	GSC	Operator: Did PUMP 6 STOP? HMI: PUMP 6 OFF? [YES]
5/28/99 15:38:52	6.7.22	GSC	Operator: Did SW PUMP 6 REMAIN OFF? [YES]
5/28/99 15:39:08	6.7.23	GSC	Operator: Did SW PUMP 6 REMAIN OFF? [YES]
5/28/99 15:39:44	6.7.24	GSC	Operator: Are AUTO and AUTO REF lights ON? [YES]

		Brian C. Harvey	5/29/99
DynCorp Test Director	Date	FDNW Project Manager	Date
Gregory L. Carpenter	5/28/99	Milly V. Thomas	5/28/99
FDNW Test Director	Date	Recorder - FDNW	Date
G L Clark	5/28/99	[illegible]	6/30/99
Authorized Inspector - FDH	Date	Witness	Date

Exceptions Report

Section SW PUMP 6 ATP (6.7)

LogDate	ID	Tester	RAA	EAA	O	Description
			☐	☐	☐	

* FOR STEPS 6.7.17 & 6.7.24: SEE EXCEPTION AGAINST #6.6
TLS 5/29/99

Thomas Swart	5/29/99	Brian C Harrow	5/29/99	Gregory J Carpenter	5/28/99
DynCorp Test Director	Date	FDNW Project Manager	Date	FDNW Test Director	Date
William K. Thomas	5/29/99	R K Clarke	5/28/99	[illegible]	6/3/99
Recorder - FDNW	Date	Authorized Inspector -FDH	Date	Witness	Date

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6.8 Sodium Hypochlorite Pump ATP

6.8.01	HMI: Verify HMI is in communication with the 283E PLC. HMI: Is the 283E communication light blinking?
Prep	HMI: Go to the EAST CHLORINE FEED SYSTEM Faceplate and click on the Sodium Hypochlorite Pump Symbol.
Prep	HMI: DWG H-2-827237 SH 1 (Ref. for the next steps).
Prep	Technician: Go to the Sodium Hypochlorite Pump (WY13)(P_283E_207).
6.8.02	Technician: Verify that the Sodium Hypochlorite Pump dial is positioned clockwise past 0. Technician: Is the Sodium Hypochlorite Pump dial above 0.
6.8.03	HMI: Switch the Operational Mode to MANUAL. HMI: Is the pump set to MANUAL?
6.8.04	HMI: Increase the frequency to 50%. Technician: Is local display = 50 strokes/min ± 1 stroke/min?
6.8.05	HMI: Increase the frequency to 100%. Technician: Is local display = 100 strokes/min ± 1 stroke/min?
6.8.06	HMI: Decrease the frequency to 0%. Technician: Is local display = 0 strokes/min ± 1 stroke/min?
Prep	HMI: Close the EAST CHLORINE FEED SYSTEM Faceplate and verify event log.

Passing Report

Section SODIUMPMPATP

LogDate	ID	Tester	Description
5/29/99 13:10:12	6.8.01	GSC	HMI: Is the 283E communication light blinking? [YES]
5/29/99 13:10:43	6.8.02	GSC	Technician: Is the Sodium Hypochlorite Pump dial above 0. [YES]
5/29/99 13:10:51	6.8.03	GSC	HMI: Is the pump set to MANUAL? [YES]
5/29/99 13:11:16	6.8.04	GSC	Technician: Is local display = 50 strokes/min ± 1 stroke/min? [YES]
5/29/99 13:11:51	6.8.05	GSC	Technician: Is local display = 100 strokes/min ± 1 stroke/min? [YES]
5/29/99 13:12:17	6.8.06	GSC	Technician: Is local display = 0 strokes/min ± 1 stroke/min? [YES]

Tom McAch	5/29/99	Brian C. Lawson	5/29/99
DynCorp Test Director	Date	FDNW Project Manager	Date
Gregory Carpenter	5/29/99	Gregory Carpenter	5/29/99
FDNW Test Director	Date	Recorder / FDNW	Date
[illegible]	5/29/99	DJ Ronan	5/29/99
Authorized Inspector / FDH	Date	Witness	Date

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Exceptions Report

Section 6.8

LogDate	ID	Tester	RAA	EAA	O	Description
			☐	☐	☐	

NO EXCEPTIONS
6/28/99
RS

Tom McPh	5/29/99	Brian C. Harrow	5/29/99	Gregory Sharpentier	5/29/99
DynCorp Test Director	Date	FDNW Project Manager	Date	FDNW Test Director	Date
Gregory Sharpentier	5/29/99	EF Enlow Jr	5/29/99	SJ Romero	5/29/99
Recorder - FDNW	Date	Authorized Inspector - FDH	Date	Witness	Date

5/29/99 13:13:06 13:13:06

7. EXCEPTIONS TO ACCEPTANCE TEST

* All Approvals Documented on Acceptance of Completed Work Forms (pages 198-208).

Brian C Hanson
1-11-00

EXCEPTION NO.	Project No.	ATP No.	Rev.

Recorded By	Organization	Date Recorded	ATP Package No.

Step No.	Requirement

Description of Problem

Objector 1 (Name/Organization)	Objector 2 (Name/Organization)

Planned Action

Action Taken

RETEST EXECUTION AND ACCEPTANCE

Retest Installation Contractor	Date	Recorder	Date
Witness 1 (Name/Organization)	Date	Witness 2 (Name/Organization)	Date
Field Engineering	Date	Test Director (Name/Organization)	Date
Design Engineering (Author of ATP)	Date	A-E Project Engineer	Date

APPROVAL AND ACCEPTANCE - CLIENT

☐ Retest Approved and Accepted ☐ Exception Accepted-as-is* ☐ Other*

* Explanation

Approver 1	Date	Approver 2	Date
Approver 3	Date	Approver 4	Date

EXCEPTION NO.	Project No.	ATP No.	Rev.

Recorded By	Organization	Date Recorded	ATP Package No.

Step No.	Requirement

Description of Problem

Objector 1 (Name/Organization)	Objector 2 (Name/Organization)

Planned Action

Action Taken

RETEST EXECUTION AND ACCEPTANCE

Retest Installation Contractor	Date	Recorder	Date
Witness 1 (Name/Organization)	Date	Witness 2 (Name/Organization)	Date
Field Engineering	Date	Test Director (Name/Organization)	Date
Design Engineering (Author of ATP)	Date	A-E Project Engineer	Date

APPROVAL AND ACCEPTANCE - CLIENT

☐ Retest Approved and Accepted ☐ Exception Accepted-as-is* ☐ Other*

* Explanation

Approver 1	Date	Approver 2	Date
Approver 3	Date	Approver 4	Date

All personnel involved in the performance of this test including the person-in-charge (PIC), data taker/recorder, verifier and witnesses shall fill out the date below:

PRINT NAME	SIGN NAME	INITIAL	POSITION	DATE
Tom Sweet	Thomas Sweet	TCS	Ops Test Director	5/15/99
Steve Romero	Steve D. Romero	SDR	FDNW Test Director	5/15/99
Will Thomas	Will Thomas	W.T.	Recorder	5/15/99
Chris Ghormley	Chris S Ghormley	CSG	Test Operator	5/15/99
Steve Romero	Steve D. Romero	SDR	Lead Design Engineer	5/15/99
Bob Taylor	Robert Taylor (Bob)	RT	FDH A/E Inspector	5-15-99
Brian Harmon	Brian C. Harmon	BCH	Project Manager	5/15/99
James Tidwell	James Tidwell	JT	Witness	5/15/99
Bao Nguyen	Bao Nguyen		Witness	
Sam Camp	Samuel R. Camp	SC	Witness	5/15/99
Tony McPherson	Tony McPherson	TM	Witness	5/15/99
Technician (Bob Edwards)	Bob Edwards	BAE	Electrician (PCE)	5/15/99
~~Bao Nguyen~~	~~Bao Nguyen~~	~~BHN~~		

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9. TEST APPROVAL

ACCEPTANCE OF COMPLETED WORK

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05/20/1999

Project Number: L-286 , ACW #1

Project Title: 200 East Sanitary Water Plant Effluent Stram Reduction

Building Number(s): 283W

Work on this project/system has been completed and accepted by the user/sponsor with exception of the items listed on sheet 2.

Remarks FOR 283W:

- EQUIPMENT TESTED UNDER ATP SECTIONS 2.1; 2.3; 2.4; 2.5; 2.6; 2.7; 2.8; 2.9; 2.10; 2.11; 2.12; 2.13; & 2.14; IS ACCEPTED W/ EXCEPTIONS NOTED IN ATP.
- EQUIPMENT UNDER SECTIONS 2.2; AND 2.15 → 2.19 REMAIN TO BE TESTED.
- SEPERATE ACW WILL BE ISSUED FOR 282WC, 282EC & 283E + OVERALL CONTROL SYSTEM (TOTAL OF 5)

Projects Department	DJ Tollefson	Date	5/20/99
Safety (when appropriate)	N/A	Date	—
Quality Assurance	N/A	Date	—
User/Sponsor	TLS 5/19/99 James [illegible] 5/20/99	Date	5/20/99
Acceptance Inspector	[illegible]	Date	5/20/99
Construction Contractor	Lucas FDNW, for Mamillin Constructors	Date	5/20/99

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ACCEPTANCE OF COMPLETED WORK (continued)

PAGE 2 of 2

Exceptions to Completion as of the date of acceptance by the user/sponsor.

- CLOSE & ACCEPT ATP EXCEPTIONS
- COMPLETE OTP
- COMPLETE AS-BUILT DRAWINGS
- FINALIZE SUBMITTALS
- TRAINING
- DESCRIPTION OF OPERATIONS

Final Acceptance (all exceptions are completed)

Projects Department	Brian C Hanson	Date	1-4-00
Safety (when appropriate)	N/A	Date	—
Quality Assurance	N/A	Date	—
User/Sponsor	RS 1/4/00	Date	—
Acceptance Inspector	G L Clark	Date	1-6-00
Construction Contractor	Brian C Hanson For D.J. McMillin Const.	Date	1-4-00

ACCEPTANCE OF COMPLETED WORK

e:

Project Number: L-286 , ACU # 2

Project Title: 200 East Sanitary Water Plant Effluent Stream Reduction

Building Number(s): 283-E ATP # HNF-4524

Work on this project/system has been completed and accepted by the user/sponsor with exception of the items listed on sheet 2.

Remarks FOR 283E:
SECTION 6.*

- FOR EQUIPMENT TESTED UNDER SECTIONS 6.1, 6.2, 6.3, 6.4, 6.5, 6.6 + 6.7 + 6.8

~~- HMI~~
TLS

Projects Department	Brian C. Hanson	Date	5/29/99
Safety (when appropriate)	N/A	Date	—
Quality Assurance	N/A	Date	—
User/Sponsor	TLS 5/29/99 Samuel L. Camp Jr. for JL Day (on TELCON)	Date	5/29/99
eptance Inspector	5/29/99	Date	—
Construction Contractor	Brian C. Hanson for D.T. McMillin Construction	Date	5/29/99.

ceptions to Completion as of the date of acceptance by the user/sponsor.

- CLOSE & ACCEPT ATP EXCEPTIONS
- COMPLETE OTP
- COMPLETE AS-BUILT DRAWINGS
- FINALIZE SUBMITTALS (CONTRACTOR & FDNW)
- TRAINING
- DESCRIPTION OF OPERATIONS
- RESOLVE QTP EXCEPTIONS
- FINAL OAC & EXCEPTIONS

Final Acceptance (all exceptions are completed)

Projects Department	Brian C. Hanson	Date	1-4-00
Safety (when appropriate)	N/A	Date	—
Quality Assurance	N/A	Date	—
User/Sponsor	RS 1/4/00	Date	—
ceptance Inspector	T L Clarke	Date	1-6-00
Construction Contractor	Brian C. Hanson For DJM Const.	Date	1-4-00

ACCEPTANCE OF COMPLETED WORK

Date:

Project Number: L-286, ACW # 3

Project Title: 200 East Sanitary Water Plant Effluent Stream Reduction

Building Number(s): 282-WC ATP # HNF 4524

Work on this project/system has been completed and accepted by the user/sponsor with exception of the items listed on sheet 2.

Remarks FOR 282WC
SECTION 3.*

- FOR EQUIPMENT TESTED UNDER SECTION 3.0 (3.01 → 3.91)

Projects Department Brian C. Hanson Date 5/29/99

Safety (when appropriate) N/A Date —

Quality Assurance N/A Date —

User/Sponsor TLS 5/29/99 Samuel R. Camp for J.C. Day per telcon Date 5/29/99

Acceptance Inspector 5/29/99 Date —

Construction Contractor Brian C. Hanson For N.T. McMullin Construction Date 5/29/99.

ACW # 3

ACCEPTANCE OF COMPLETED WORK (continued)

PAGE 2 of 2

ceptions to Completion as of the date of acceptance by the user/sponsor.

- RESOLVE & ACCEPT ATP EXCEPTIONS
- COMPLETE OTP
- COMPLETE AS-BUILT DRAWINGS
- FINALIZE SUBMITTALS (CONTRACTOR & FDNW)
- TRAINING
- DESCRIPTION OF OPERATIONS
- RESOLVE QTP EXCEPTIONS
- FINAL OAC & EXCEPTIONS

Final Acceptance (all exceptions are completed)

Projects Department	Brian C. Hanson	Date	1-4-00
Safety (when appropriate)	N/A	Date	—
Quality Assurance	N/A	Date	—
User/Sponsor	TLS 1/4/00	Date	—
Acceptance Inspector	T L Clarke	Date	1-6-00
Construction Contractor	Brian C. Hanson For DJM Const	Date	1-4-00

ACCEPTANCE OF COMPLETED WORK

PAGE 1 of 2

e:

Project Number: L-286, ACW # 4

Project Title: 200 East Sanitary Water Plant Effluent Stream Reduction

Building Number(s): 282-EC ATP # HNF 4524

Work on this project/system has been completed and accepted by the user/sponsor with exception of the items listed on sheet 2.

Remarks FOR 282EC TLC

SECTION ~~4.7~~ 5.*

– FOR EQUIPMENT TESTED UNDER SECTION 5.0 (5.01 → 5.94)

Projects Department Brian C. Harrow Date 5/29/99

Safety (when appropriate) N/A Date —

Quality Assurance N/A Date —

User/Sponsor TLS 5/29/99 Samuel L. Campbell for JL Day per telcon Date 5/29/99

Acceptance Inspector 5/29/99 Date —

Construction Contractor Brian C. Harrow For DT McMillin Construction Date 5/29/99

ACW #4

ACCEPTANCE OF COMPLETED WORK (continued) PAGE 2 of 2

Exceptions to Completion as of the date of acceptance by the user/sponsor.

- RESOLVE & ACCEPT ATP EXCEPTIONS
- COMPLETE OTP
- COMPLETE AS-BUILT DRAWINGS
- FINALIZE SUBMITTALS (CONTRACTOR & FDNW)
- TRAINING
- DESCRIPTION OF OPERATIONS
- RESOLVE QTP EXCEPTIONS
- FINAL OAC & EXCEPTIONS

Final Acceptance (all exceptions are completed)

Projects Department	Brian Clausen	Date	1-4-00
Safety (when appropriate)	N/A	Date	—
Quality Assurance	N/A	Date	—
User/Sponsor	TLS 01/04/00	Date	—
Acceptance Inspector	T L Clark	Date	1-6-00
Construction Contractor	Brian Clausen For DJM Const.	Date	1-4-00

ACCEPTANCE OF COMPLETED WORK

PAGE 1 of 2

Date:

Project Number: L-286, ACW #5

Project Title: 200 East Sanitary Water Plant Effluent Stream Reduction

Building Number(s): 283-E, 283-W, 282-EC, 282-WC COMMUNICATIONS SYSTEM

Work on this project/system has been completed and accepted by the user/sponsor with exception of the items listed on sheet 2.

Remarks

4, *

SECTION ~~5.~~ TLS

* Original Signatures Have Been Misplaced BCH. 1-5-00.

Projects Department	Brian C. Hansen	Date	1-5-00
Safety (when appropriate)	N/A	Date	—
Quality Assurance	N/A.	Date	—
User/Sponsor	TLS 01/05/00	Date	—
Acceptance Inspector	G K Clarke	Date	1-6-00
Construction Contractor	Brian C. Hansen For DJM	Date	1-5-00

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ACCEPTANCE OF COMPLETED WORK (continued) PAGE 2 of 2

ceptions to Completion as of the date of acceptance by the user/sponsor.

See ATP Section 4.

Final Acceptance (all exceptions are completed)

Projects Department · Brian C Howard Date 1-5-00

Safety (when appropriate) N/A Date —

Quality Assurance N/A Date —

User/Sponsor RS 01/05/00 Date —

Acceptance Inspector T L Clark Date 1-6-00

Construction Contractor Brian C Howard Date 1-5-00