

Levels in feet:

Print
Screen

HQR 10.192

SR "B" 17.590

MCC Room Temp:
84.8

GST 27.919

6C. Alarms & Second

18 Acknowledged Alarms In Summary

Treatment Flows:

Monday, January 27, 2014 9:01:40 AM

Discharge Flows:

RO 0.000

1961 0.000

1987 0.000

2010 3.921

mgd

30" 0.067

36" 0.000

PSI 39.73

Login
Logout

WASHWATER LAGOON
RETURN PUMP STATION
PUMP 1

3192.4 Hours



WASHWATER LAGOON
RETURN PUMP STATION
PUMP 2

3204.6 Hours



WASHWATER LAGOON
RETURN PUMP STATION
PUMP 3

2960.0 Hours



WASHWATER LAGOON
RETURN PUMP STATION
PUMP 4

2948.2 Hours



WASHWATER RETURN PUMP
STATION DISCHARGE VALVE
Flow Controller

CY41711 Flow in MGD

PV:

1.85

SP:

11.0

OUT:

0.0

0 20 40 60 80 100

Valve Position in Percent

AUTO Auto/Manual MANUAL

Manual Position SP: 21.0 %

Lagoon Percent Flow: 47.3 %

Lagoon Percent Flow Shutdown SP: 50.0 %

Shutdown Delay SP: 15.0 Minutes

CLOSE

PLC_F

Raw
Water
Systems

1961 & 1987
Facilities

Jasper

Membrane
Facilities
2010

Utilities

Raw Water

Filtration

Reverse
Osmosis

Finished
Water

Distribution
System

Membrane
Waste

Chemicals

CL02

Solids

Previous

ScreenPrint

Clear Clear All

Levels in feet:	HQR	10.272	<i>Enc B</i>		19 Acknowledged Alarms In Summary				Summary		Login							
	SR "B"	17.220	Treatment Flows:				Tuesday, January 28, 2014 9:06:15 AM				Discharge Flows:							
MCC Room Temp.	GST	27.865	RO	0.000	1961	0.000	1987	0.000	2010	3.900	mgd	30"	0.052	36"	0.000	PSI	40.75	Logout

SECONDARY RESERVOIR	PUMP #1	PUMP #2	PUMP #3	PUMP #4	CURRENT	TOTALIZED
RUNTIMES	3215.9	1021.7	2960.0	2948.2		
FLOW					1.8	518.9
VALVE POSITION					21.0	

LAGOON RETURN	PUMP #1	PUMP #2	PUMP #3	PUMP #4	CURRENT	TOTALIZED
RUNTIMES	3215.9	1021.7	2960.0	2948.2		
FLOW					1.8	518.9
VALVE POSITION					21.0	

RECOVERY WELL	PUMP #1	PUMP #2	PUMP #3	PUMP #4
RUNTIMES	1819.9	1021.7	178.5	182.4
LEVEL	6.1	6.5		

SLUDGE PUMP STATION #3	PUMP #1	PUMP #2	MF CLARIFIER SLUDGE VALVES	UNIT 1
RUNTIMES	70.4	1.9	OPEN TIMER SP	1.0
LEVEL	3.1		CLOSED TIME SP	250.0

SLUDGE PUMP STATION #2	PUMP #1	PUMP #2	2010 SLUDGE VALVES	UNIT 1	UNIT 2
RUNTIMES	395.4	300.2	OPEN TIMER SP	0.0	0.0
LEVEL	3.1		CLOSED TIME SP	12.0	9.0

TRENDS

Page 01

Raw Water Systems	1961 & 1987 Facilities	Jasper	2010	Membrane Facilities	Trends	Activity Log	Alarm Log	Alarm Disable	HARDWARE DIAGNOSTICS	Security	DPR	Quit	Previous
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ScreenPrint

Clear

Clear All

2010 Clarifier

Enclosure B

17 Acknowledged Alarms In Summary

Treatment Flows:

Monday, January 27, 2014 5:07:21 PM

Discharge Flows:

BACKWASH

BLOWER

BW PUMP

OVERVIEW

ALL STATUS

CELL 4 STATUS

1

2

3

4

5

C4xN78[35]

5400.

C4.CIP.T[13]:

0

Filter State:

170.0

CIP Step:

0.0

CIP Tank Level:

8.8

CURRENT

1st

2nd

3rd

4th

5th

PRESSURE DECAY TEST	
INTERVAL (hours)	24
SINCE LAST (hh:mm)	23:54
LAST PDT	17:21: 2 1/21/2014
TEST START PRESSURE	18.09 PSI
TEST STOP PRESSURE	17.17 PSI
LAST TEST RESULTS	0.46 PSI/Min
LOG REDUCTION VALUE	5.72
FLUX	15.84 G/FT ² /D
START	

BACKWASH	
INTERVAL (minutes)	30
SINCE LAST (hh:mm:ss)	00:16:28
FILTERED VOLUME SETPOINT	87500
TURB. ADJUSTED SETPOINT	87500
VOLUME THIS INTERVAL	6600
TIME REQUESTED (mm:ss)	00:00
BACKWASH TODAY GALLONS	118800
BACKWASH YESTERDAY GALLONS	46200
START	

FILTER ONLINE TIME (Minutes)	
ONLINE TODAY	613
ONLINE YESTERDAY	243

MACHINE STATUS	
TMP	1.57 PSI
RESISTANCE	1.26
FEED TURBIDITY	1.49 NTU
FILTRATE TURBIDITY	0.060 NTU
FILTRATE TURBIDITY "LASER"	0.023 NTU
FILTRATE PARTICLE CH 1	400 C/M/L
FILTRATE PARTICLE CH 2	0 C/M/L
FILTRATE PARTICLE CH 3	0 C/M/L
FILTRATE PARTICLE CH 4	0 C/M/L
PUMP FLOW	1665 GPM
FILTRATION FLOW	1665 GPM
PUMP SPEED	56 %
CELL LEVEL	7.0 FT
FEED VALVE POSITION	51 %
MAX. FLOW SETPOINT	1665 GPM

NORMAL
FILTRATION

LEAK TEST	
START TEST	STOP TEST

STANDARD CIP	
INTERVAL (hours)	720
SINCE LAST (hh:mm)	0012:40

MAINTENANCE CIP	
INTERVAL (hours)	24
SINCE LAST (hh:mm)	0012:40

FLOW TOTALS (Gallons)	
FILTRATE TODAY	1000088
FILTRATE YESTERDAY	363781

START CELL

STOP CELL

Place Cell
Out of Service

DRAIN DOWN

START
ACID CIP

START
Memclean I
CIP

START
CHLORINE CIP

START
MAINTENANCE
CHLORINE CIP

Levels in feet:

Print
Screen
HQR 10.222
SR "B" 17.430
MCC Room Temp. 84.6
GST 27.900

Enclosure B 17 Acknowledged Alarms In Summary

Summary Login
Logout

Treatment Flows: Monday, January 27, 2014 4:49:20 PM
RO 0.000 1961 0.000 1987 0.086 2010 3.938 mgd 30" 0.120 36" 0.000
Discharge Flows: PSI 39.46

SECONDARY RESERVOIR	PUMP #1	PUMP #2	PUMP #3	PUMP #4	CURRENT	TOTALIZED
RUNTIMES	3200.0	1021.7	2960.0	2948.2		
FLOW					1.8	518.9
VALVE POSITION					21.0	

LAGOON RETURN	PUMP #1	PUMP #2	PUMP #3	PUMP #4	CURRENT	TOTALIZED
RUNTIMES	3200.0	1021.7	2960.0	2948.2		
FLOW					1.8	518.9
VALVE POSITION					21.0	

RECOVERY WELL	PUMP #1	PUMP #2	PUMP #3	PUMP #4
RUNTIMES	1819.9	1021.7	173.0	174.9
LEVEL	6.5	7.0		

SLUDGE PUMP STATION #3	PUMP #1	PUMP #2	MF CLARIFIER SLUDGE VALVES	UNIT 1
RUNTIMES	70.4	1.9	OPEN TIMER SP	1.0
LEVEL	3.0		CLOSED TIME SP	250.0

SLUDGE PUMP STATION #2	PUMP #1	PUMP #2	2010 SLUDGE VALVES	UNIT 1	UNIT 2
RUNTIMES	395.4	300.2	OPEN TIMER SP	0.0	0.0
LEVEL	3.0		CLOSED TIME SP	12.0	9.0

TRENDS
Page 01

Raw Water Systems

1961 & 1987 Facilities

Jasper

2010

Membrane Facilities

Trends

Activity Log

Alarm Log

Alarm Disable

HARDWARE DIAGNOSTICS

Security

DPR

Quit

Previous

DESCRIPTION	SECONDARY	MICROFILTRATION PLANT			RO FEED	LAGOON RETURN		2010 PLANT	
	RESERVOIR	FLOW CONTROL	CLARIFIER EFFLU*	COMBINED				CLEARWELL	TRANSFER
TEMPERATURE		12.96	14.73	16.80				8.13	7.76
TURBIDITY	26.41			1.30	0.11				0.15
pH		7.86	8.09	5.41	7.51			9.81	9.16
TOTAL CHLORINE		2.14	0.86	1.27				3.49	4.41
FREE CHLORINE		1.00	0.29	0.53				0.37	0.59
FREE AMMONIA		1.68	2.41	7.88				0.00	0.26
MONOCHLORAMINE		2.00	0.96	1.26				3.06	2.51
CONDUCTIVITY					0.00				0.55
TSS					-0.50				
NITRATE							% Flow		1.06
FLOW	1.93			1.80	2.40	1.89	49.4	3.93	3.90

MICROFILTRATION	CELL 1	CELL 2	CELL 3	CELL 4	CELL 5
FILTRATE TURBIDITY "LASER"	0.0422	0.1488	0.0188	0.0232	0.0203
FILTRATE TURBIDITY	0.0387	0.0000	0.0005	0.0597	0.0555
TRANSMEMBRANE PRESSURE	-0.83	-0.63	-0.69	1.61	2.52
FLUX	0.00	0.00	0.00	0.00	0.00
FILTRATE FLOW	0	0	0	1649	1253
CELL FILTRATE TODAY	0	0	0	583003	494965
CELL FILTRATE YESTERDAY	0	0	769534	363781	1266254
REVERSE OSMOSIS	TRAIN #1	TRAIN #2	TRAIN #3	TRAIN #4	TRAIN #5
PREMEATE FLOW	0.0	0.0	0.0	2.0	0.0
PERMEATE CONDUCTIVITY	49.3	0.0	0.0	22.6	6.5
CONCENTRATE FLOW	0.0	0.0	0.0	0.7	0.0
CONCENTRATE CONDUCTIVITY	1427.1	30.1	29.5	5635.4	4.4
2010 PLANT	CELL 1	CELL 2	CELL 3	CELL 4	CELL 5
FILTRATE FLOW	2.0025	0.0000	1.9253	0.0000	0.0000
FILTRATE TURBIDITY	0.0771	0.0000	0.0735	0.0000	0.0000

Levels in feet:
Print Screen
MCC Room Temp. 84.8

HQR	10.143
SR "B"	17.600
GST	27.913

19 Acknowledged Alarms In Summary

Summary

Login

Treatment Flows:

Monday, January 27, 2014 10:17:56 AM

Discharge Flows:

RO	0.000	1961	0.000	1987	0.000	2010	3.829	mgd	30"	0.072	36"	0.000
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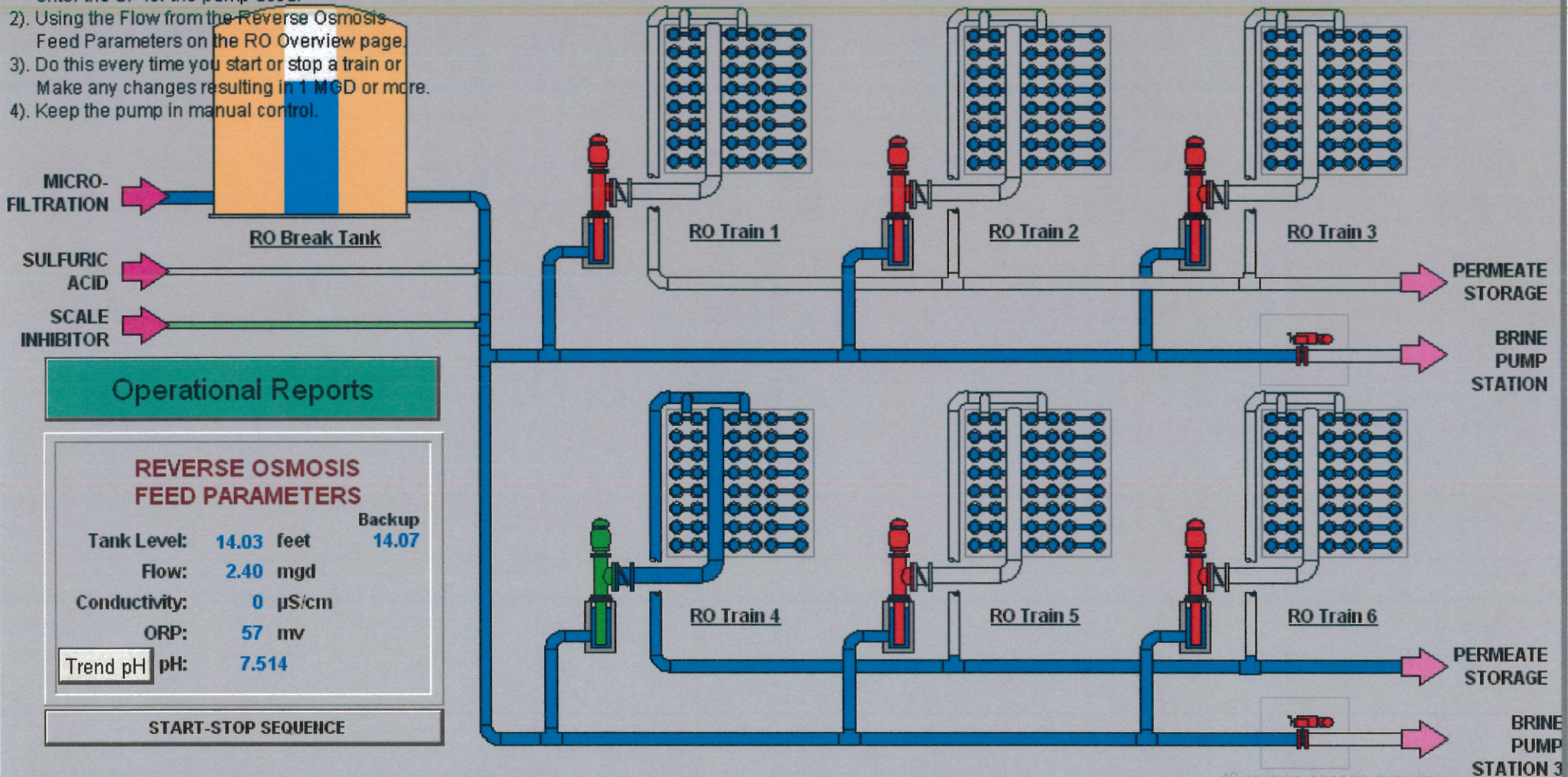
PSI 31.29

Logout

Until programming issues can be installed on Scale Inhibitor:

REVERSE OSMOSIS OVERVIEW

- 1). Using the latest pump calibration sheet enter the SP for the pump used.
- 2). Using the Flow from the Reverse Osmosis Feed Parameters on the RO Overview page.
- 3). Do this every time you start or stop a train or Make any changes resulting in 1 MGD or more.
- 4). Keep the pump in manual control.



Raw Water Systems	1961 & 1987 Facilities	Jasper	Membrane Facilities 2010	Utilities	Raw Water	Filtration	Reverse Osmosis	Finished Water	Distribution System	Membrane Waste	Chemicals	CL02	Solids	Previous
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Start Client Client Client

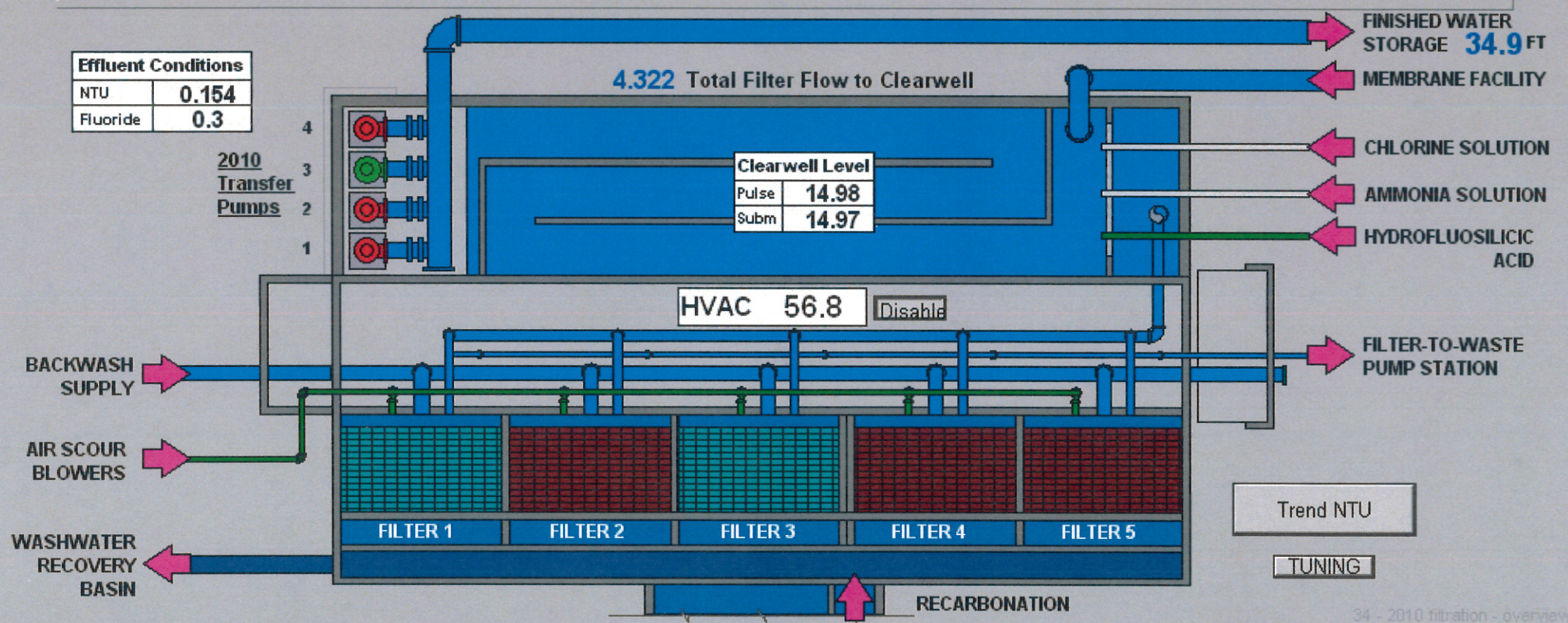
10:07 AM

2010 PLANT - FILTRATION OVERVIEW

	FILTER 1	FILTER 2	FILTER 3	FILTER 4	FILTER 5
Mode:	ON-LINE	OFF-LINE	ON-LINE	OFF-LINE	OFF-LINE
Effluent Flow:	2.178 MGD	0.000 MGD	2.144 MGD	0.000 MGD	0.000 MGD
Effluent Turbidity:	0.078 HTU 0.078	0.000 HTU 0.093	0.073 HTU 0.073	0.000 HTU 0.212	0.000 HTU 0.127
Loss of Head:	0.853	0.000	0.184	0.000	0.000
Level:	9.623 Feet	3.837 Feet	9.488 Feet	2.665 Feet	2.859 Feet
Run Time:	83.81 Hours	0.00 Hours	11.26 Hours	0.00 Hours	0.00 Hours
Flow Y'day Total:	1.857 MG	1.741 MG	0.096 MG	0.000 MG	0.000 MG
BW Yesterday Total:	0 GAL	0 GAL	0 GAL	0 GAL	0 GAL

Effluent Conditions	
NTU	0.154
Fluoride	0.3

2010
Transfer
Pumps



34 - 2010 filtration - overview

2010 CONSTANT SPEED PUMP CONTROL

14.99 Feet

20.0

18.0

16.0

14.0

12.0

10.0

8.0

6.0

4.0

2.0

0

Start LAG

Start LEAD

Stop LAG

Stop LEAD

LAG START

16.0

LEAD START

14.0

LAG STOP

12.0

LEAD STOP

11.0

2010 TRANSFER PUMP #1 (CS)

130.7 Hours

REMOTE

LEAD

MANUAL

LOCAL

REMOTE

OFF

ON

STOP

START

FAULT RESET

FAULT

10.0

LoLo Alarm SP

2010 TRANSFER PUMP #2 (CS)

121.6 Hours

REMOTE

LAG

MANUAL

LOCAL

REMOTE

OFF

ON

STOP

START

FAULT RESET

FAULT

Nitrate

1.08

mv

Nitrate High SP

10.0

mv

Time Delay SP

15.0

Minutes

2010 TRANSFER PUMP #3 (VFD)

4260.8 Hours

REMOTE

PRIMARY

AUTO

LOCAL

REMOTE

OFF

ON

STOP

START

FAULT RESET

FAULT

9.4

Calculated Value

2010 TRANSFER PUMP #4 (VFD)

6506.4 Hours

LOCAL

STANDBY

MANUAL

LOCAL

REMOTE

OFF

ON

STOP

START

FAULT RESET

FAULT

VFD Low Level Reset SP

15.0

Feet

VFD Low Level Cutoff SP

11.0

Feet

2010 VFD PUMP SPEED CONTROL

Clearwell_Level

FEET

20.0

18.0

16.0

14.0

12.0

10.0

8.0

6.0

4.0

2.0

0

PV:

14.99

SP:

15.0

OUTPUT:

9.4

0

20

40

60

80

100

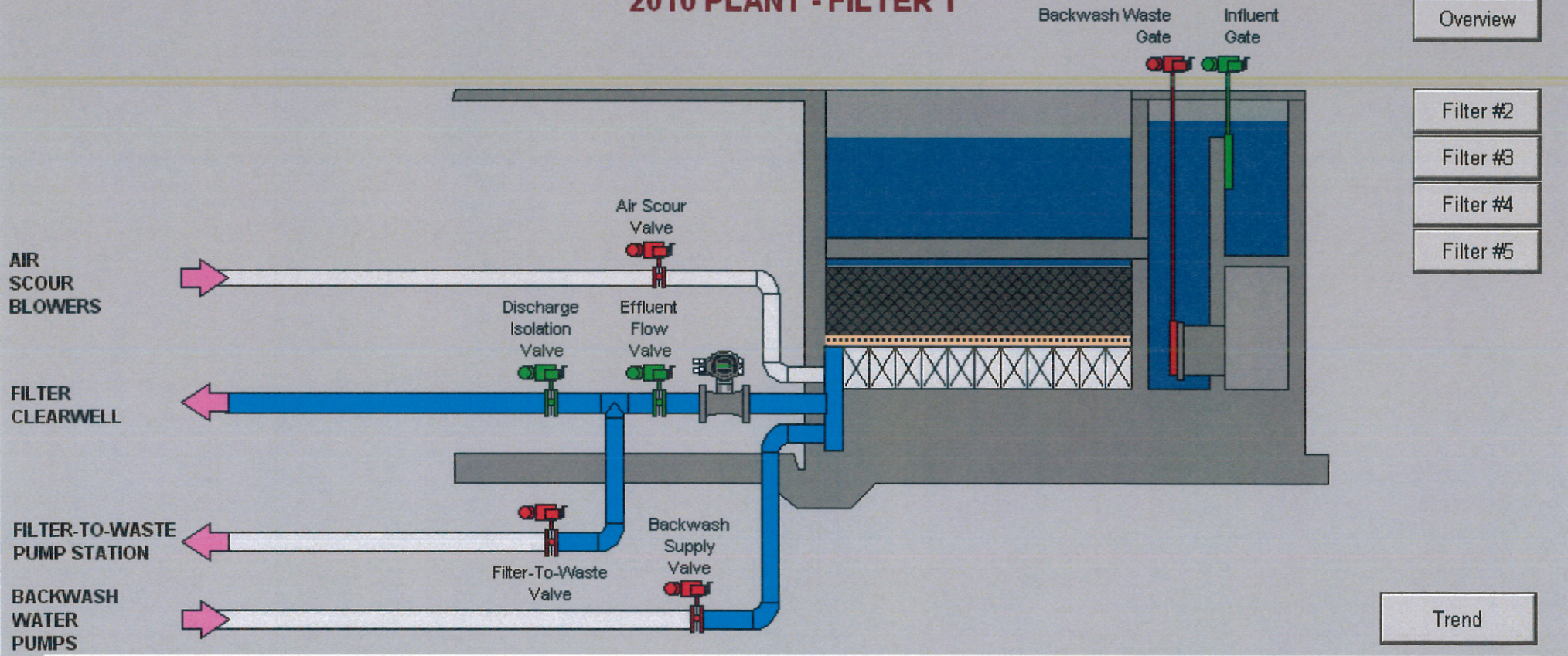
TREND

CLOSE

Manual Speed SP

50

2010 PLANT - FILTER 1



Mode: **ONLINE**

Effluent Turbidity: 0.076 NTU

Effluent Flow: 1.910 mgd

Total Effl. Flow: 0.778 mgd

Turbidity Shutdown SP: 0.150 NTU

Shutdown Delay SP: 15.0 Minutes

Filter Headloss: 0.48 feet

Filter Runtime: 83.17 hours

Filter Level: 9.58 feet

Air Scour Flow: 0 scfm

Backwash Water Flow: 0.0 mgd

BW Water Used: 0 gal

34 - 2010 filter A - main

WASHWATER LAGOON RETURN PUMP STATION

