



726 Beacon St, Loves Park, IL 61111 | 815-636-8833 | 800-919-0888 | 815-636-8844 fx | www.watersurplus.com

EQUIPMENT DATA SHEET RO

Description	200 GPM Two Pass RO Container
--------------------	-------------------------------

Asset #:	ROE3100252-1R
-----------------	---------------

Owner		Mfg. Yr.
Watersurplus		2009

EQUIPMENT TYPE	OEM
RO System	Culligan

NORMAL OPERATING PARAMETERS		
Operating Water Temperature	70	°F
Min. Inlet Water Pressure	30	PSI
Maximum SDI	3	SDI
Maximum Turbidity	≤ 1	NTU
Max. Free Chlorine/chloramines	< .02	PPM
Nominal Operating Pressure	218	PSI
Maximum Recovery	75	%
Maximum TDS	5000	ppm

UNIT CONFIGURATION x (2) UNITS		
# Passes Per Unit	2	A & B
# Stages Per Pass	3	
Array Per Pass	3:2:1	
Hsg Size, Mat'l, psi, Mfr	8" x 4M, FRP, 300 psi, WaveCyber Model 300P-8	
Total # membranes	48	(96) 4 RO's total
Pre-Filter Cartridge	(2) Shelco 7Rx40 #7FOS4	
Pre-Filter Element	(14) GE 2x40, 1 Micron, MB	

POWER REQUIREMENTS					
GENERAL POWER	VAC	PH	HZ	Amps	Src
Total High Voltage	460	3	60	300	Ext
Total Control Voltage	120	1	60	20	Int
PUMPS & MOTORS					
Individual Motors	VAC	PH	HZ	HP	Amps
(2) Primary First Pass	460	3	60	40	45
(2) Second Pass	460	3	60	40	45
CIP	n/a				
Inlet Feed/Trans	n/a				

FLOW SPECIFICATIONS		
Total Feed	278	gpm
Total Product	200	gpm (72% Rec)
Total Reject	78	gpm
Recycle Per Unit	27	gpm (ea. 2 Pass)
Flush Per Unit	39	gpm (ea. 2 Pass)
Total Drain	78	gpm
Instrument Air	80	psi
	5	SCFM

CONTROLS	
Main Controller	AB MicroLogix1400-1766L32BXBA
HMI	AB PanelView 1000, 10" Screen
I/O Type	AB 1762- IF4, OF8, IQ16, IF8U, OW8
Motor Starter	(4) Goulds Aquavar CPC VFD
Chem Pumps Qty.	(4) Pulsafeeder Puslatron MP
Chm Pmp Ctrl Method	PLC

PHYSICAL SPECIFICATIONS		
Length	576	inches
Width	102	inches
Height (incl Chassis)	160	inches
Weight (shipping)	44360	lbs.(no memb)
Weight (operating)	48360	lbs.(memb+water)
Inlet Piping Material	6" sch 80 PVC	
Outlet Piping Material	6" sch 80 PVC	

AVAILABLE DOCUMENTATION				
Description	AVAIL	Description	AVAIL	
Process & Instrumentation Diagram - P&ID	Y	Electrical Schematics	Y	
Piping layout/General Arrangement	Y	Program Logic	Y	
Major Component List - MC List	Y	Operations/Maintenance Manuals	Y	

EQUIPMENT DATA SHEET RO

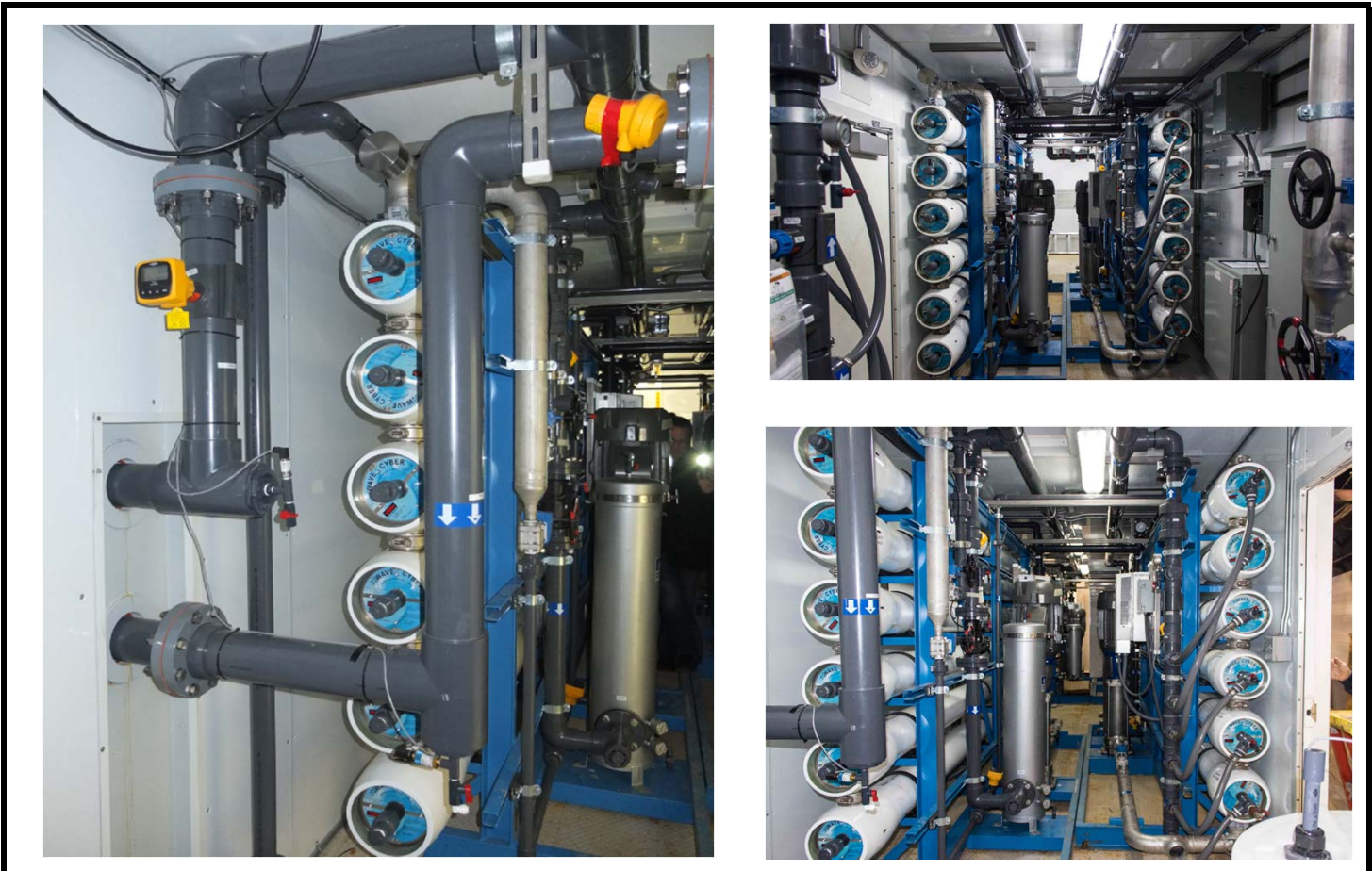
Description	200 GPM Two Pass RO Container
--------------------	-------------------------------

Asset #:	ROE3100252-1R
-----------------	---------------

Owner		Mfg. Yr.
Watersurplus		2009

EQUIPMENT TYPE	OEM
RO System	Culligan

PROCESS CONNECTIONS (SIZES & LOCATION SYMBOLS)		
	Size & Type	Location Symbol
Feed Inlet	6" ANSI 150 Flanged	Front Left Side
Permeate outlet	6" ANSI 150 Flanged	Front Left Side
Concentrate to drain	4" ANSI 150 Flanged	Front Left Side
CIP Inlet	3" Victaulic 316 SST	On Each RO - (4 RO's)
CIP Outlet	3" Victaulic 316 SST	On Each RO - (4 RO's)
Instrument Air	On Board Air Compressor	Left Front Corner



EQUIPMENT DATA SHEET RO

Description	200 GPM Two Pass RO Container
--------------------	-------------------------------

Asset #:	ROE3100252-1R
-----------------	---------------

Owner		Mfg. Yr.
Watersurplus		2009

EQUIPMENT TYPE	OEM
RO System	Culligan



MISCELLANEOUS INFORMATION

Mobile RO chassis / container designed for 200 gpm of high quality permeate output. Container is set up with two complete two pass RO systems capable of providing 100 gpm of permeate each. This system comes complete with a full PLC automatic control system and full on board power distribution / transformer for automatic system operation. Users only have to bring in one power supply to the container and three fluid connections. PLC control is done through a touch screen HMI. pH adjust, sodium bisulfite and antiscalant chemical feed systems are included and automatically controlled through the PLC / HMI. RO pretreatment must be provided by other means as none are included with this containerized system.

This Container includes a mobile, heavy duty chassis with custom adjustable rear support stanchions and heavy duty adjustable front stanchions in addition to the standard front stanchion. Container is fully lighted with two convenient man doors and ladder for access to the container. Back access is double swing doors.



726 Beacon St, Loves Park, IL 61111 | 815-636-8833 | 800-919-0888 | 815-636-8844 fx | www.watersurplus.com

EQUIPMENT DATA SHEET RO

Description	200 GPM Two Pass RO Container
--------------------	-------------------------------

Asset #:	ROE3100252-1R
-----------------	---------------

Owner		Mfg. Yr.
Watersurplus		2009

EQUIPMENT TYPE	OEM
RO System	Culligan

INSTRUMENTATION

Pressure	Ind.	Sw.	Xmtr	Manufacturer	Part Number
Low Inlet		X		Transducers Direct	1/4" 316 SST NPT Conn, 6-30 PSIG Adjustable
Pre-filter Inlet	X			?	2.5" Dial, 1/4" NPT, SST, 0-160 psi Glyc Fill Gauge
Pre-Filter Outlet	X			?	2.5" Dial, 1/4" NPT, SST, 0-160 psi Glyc Fill Gauge
High Pump Discharge			X	Transducers Direct	TDM52 - 7/16" NPT 316 SST Conn, 0-300 psig Range
High Pump Discharge	X			CTRBK	2.5" Dial, 1/4" NPT, SST, 0-400 psi Glyc Fill Gauge
Inter-stage					n/a
Permeate Outlet	X			?	2.5" Dial, 1/4" NPT, SST, 0-100 psi Glyc Fill Gauge
Concentrate			X	Transducers Direct	TDM52 - 7/16" NPT 316 SST Conn, 0-300 psig Range
Conductivity					
Each RO Inlet			X	GF- Signet	3-2841-1 (v), 1.0 Cell Constant, 1000ppm, Integral Mount Trans
Each RO Permeate			X	GF- Signet	3-2850-52-40, 0.1 Cell Constant, 500 ppm, Integral Mount Trans
Each RO Concentrate					n/a
Flow					
Inlet			X	GF-Signet	3-2536-P0 Paddle Wheel, 25' cable
Permeate			X	GF-Signet	3-2537-6C-P0 Paddle Wheel, 25' cable
Concentrate					n/a
Concentrate Recycle	X			GF-Signet	3-8150-PO Battery Powered Flow Totalizer
Conc Recycle pH Adj	X			GF-Signet	
Other					
pH			X	GF-Signet	3-2726-LC-00 pH, 2750-1 Analyzer
ORP			X	GF-Signet	Optional Swap Out Sensor Available

MAJOR COMPONENTS

Pumps	Manufacturer	Model	Desc
First Pass Feed	Goulds	33SV70NP4F20	e-SV Multi Stage (7) Centrifugal, 316 SST, 175 gpm @ 580 ft (251 psi) Max, Baldor Motor, 460VAC, 60 Hz, 3 pH, 40 Hp, 45 amps, TEFC



726 Beacon St, Loves Park, IL 61111 | 815-636-8833 | 800-919-0888 | 815-636-8844 fx | www.watersurplus.com

EQUIPMENT DATA SHEET RO

Description	200 GPM Two Pass RO Container
--------------------	-------------------------------

Asset #:	ROE3100252-1R
-----------------	---------------

Owner		Mfg. Yr.
Watersurplus		2009

EQUIPMENT TYPE	OEM
RO System	Culligan

Second Pass Feed CIP	Goulds	33SV70NP4F20	e-SV Multi Stage (7) Centrifugal, 316 SST, 175 gpm @ 580 ft (251 psi) Max, Baldor Motor, 460VAC, 60 Hz, 3 pH, 40 Hp, 45 amps, TEFC
Cartridge Filter	Manufacturer	Model	Desc
Housing	Shelco	7FOS4-V-316-2.5F-GP-P-E	(7) Round x 40" Element, 12" Dia 316 SST Filter Housing, 150 psig, Clamp Style Top, 2.5" Flanged Conn.
Elements	GE	RO.Zs.01-40-XK FIL2170013N	(7) 2" Dia x 40" Long Melt Blown, 1 Micron SOE With Spring
Chemical Feed	Manufacturer	Model	Desc
Antiscalant Tank	Pulsafeeder	J40366	55 Gal PE Tank w/ Ridged Slip On Top
Antiscalant Pump	Pulsafeeder	LMASTA-VTCY-500	PulsaTRON MP PD Diaphragm Pump, 0.50 gph (12 gpd), 100 psig, 3/8" tubing Conn, 115VAC, 60 Hz, 1 pH, 0.6 amps
Antiscalant Mixer	Dayton	6GAK9	Mini Mixer, 1/4" dia x 36" long 316 SST Shaft, Four Blade Impeller, 115VAC, 60 Hz, 1 ph, 1/20 Hp, 1.9 amp, 1550 rpm Motor
Antiscalant Level	?	?	1" PVC Float Well and Float Switch
Unit A Caustic Tank	Pulsafeeder	J40366	55 Gal PE Tank w/ Ridged Slip On Top
Unit A Caustic Pump	Pulsafeeder	LMASTA-VTCY-500	PulsaTRON MP PD Diaphragm Pump, 0.50 gph (12 gpd), 100 psig, 3/8" tubing Conn, 115VAC, 60 Hz, 1 pH, 0.6 amps
Unit A Caustic Mixer	Dayton	6GAK9	Mini Mixer, 1/4" dia x 36" long 316 SST Shaft, Four Blade Impeller, 115VAC, 60 Hz, 1 ph, 1/20 Hp, 1.9 amp, 1550 rpm Motor
Unit A Caustic Level	?	?	1" PVC Float Well and Float Switch
Unit B Caustic Tank	Pulsafeeder	J40366	55 Gal PE Tank w/ Ridged Slip On Top
Unit B Caustic Pump	Pulsafeeder	LMASTA-VTCY-500	PulsaTRON MP PD Diaphragm Pump, 0.50 gph (12 gpd), 100 psig, 3/8" tubing Conn, 115VAC, 60 Hz, 1 pH, 0.6 amps
Unit B Caustic Mixer	Dayton	6GAK9	Mini Mixer, 1/4" dia x 36" long 316 SST Shaft, Four Blade Impeller, 115VAC, 60 Hz, 1 ph, 1/20 Hp, 1.9 amp, 1550 rpm Motor
Unit B Caustic Level	?	?	1" PVC Float Well and Float Switch



726 Beacon St, Loves Park, IL 61111 | 815-636-8833 | 800-919-0888 | 815-636-8844 fx | www.watersurplus.com

EQUIPMENT DATA SHEET RO

Description	200 GPM Two Pass RO Container
--------------------	-------------------------------

Asset #:	ROE3100252-1R
-----------------	---------------

Owner		Mfg. Yr.
Watersurplus		2009

EQUIPMENT TYPE	OEM
RO System	Culligan

Sodium Bisulfite Tank	Pulsafeeder	J40366	50 Gal PE Tank w/ Ridged Slip On Top
Sodium Bisulfite Pump	Pulsafeeder	LMA2TA-PTCJ-500	PulsaTRON MP PD Diaphragm Pump, 0.25 gph (6 gpd), 100 psig, 1/4" tubing Conn, 115VAC, 60 Hz, 1 pH, 0.6 amps
Sodium Bisulfite Mixer	Pulsafeeder	42753	Mini Mixer, 1/4" dia x 28" long 316 SST Shaft, Four Blade Impeller, 115VAC, 60 Hz, 1 ph, 1/20 Hp, 1.9 amp, 1550 rpm Motor
Sodium Bisulfite Level	?	?	1" PVC Float Well and Float Switch
Compressor	Manufacturer	Model	Desc
Container	Craftsman		33 Gal, 165 psig, ?? scfm at 90 psig rated, 115VAC, 1 pH, 60 Hz