

Penta Wood Site Equipment List

Siren, Wisconsin

Last Updated: May 21, 2014

System	Equipment	Make	Model	S/N	Size	Capacity	Quantity Ordered	Spare Quantity	Date Last Replaced	Date Installed	Company Purchased From	Date Purchased	Price	Notes: Replacement, Repairs, Lifetime
Blower System	Blower - Motor	New York Blower Co	2612ALUM or 2612 SWSI	U11211-100			1		Mar-14	Sep-07	Kruger Diversified	Mar-14	\$4,115.00	replaced in March 2014; 10 year lifespan.
Groundwater Extraction	GW Extraction Pumps	Grundfos	16S20-18		2 hp		9		Jun-13				\$ 1,402.00	replaced GW well #2 in 2013; variable lifespan.
	Dedicated MW pumps	Grundfos	Redi Flo 2				1					4/15/2011	\$ 4,588.00	approx 10 year lifetime
	Flow meters													have not replaced
	PLC Card	Allen Bradley-SLC 500	1746-NO4I				1		2010		Holt Electrics	2/21/2012	\$ 788.26	very expensive, 24 in use at site, no spares on site
Free Product Recovery	Free Product Pumps	HammerHead	EW-10 (4-in.; H43SET) EW-04, EW-05, EW-06 (2-in. , H24SET) EW-12 and EW-14 (4-in., AP4+ TL) EW-13 (2-in., AP2C-42372)											
	Free Product Pump Diaphragm	Wilden	01-1010-58				6				Anderson Pump and Process	12/17/2010	\$ 18.80	approx 10 year lifetime
	Free Product Pump Balls	Wilden	01-1080-58				8				Anderson Pump and Process	12/17/2010	\$ 4.50	approx 10 year lifetime
	Free Product Pump O-Rings	Wilden	00-1260-58				8				Anderson Pump and Process	12/17/2010	\$ 1.80	approx 10 year lifetime
Oil Water Seperator	Oil Water Seperator													have not replaced unit - have replaced small pieces of the equipment
	Level Switches													have not replaced
	Oil Water Seperator	Carbonair	COWS-30											have not replaced
	Oil Pump	Wilden	P1/APPP/WF/WF/AWF	2004821										approx 10 year lifetime
	Water Pump - Motor	Leeson	08T34F05D or Myers CT-10	Cat # 110192							Anderson Pump and Process	9/22/2011	\$ 251.47	approx 10 year lifetime, replaced pump in 2012
	Level Sensor Tree and Sight Glass							1			Carbonaire	11/14/2011	\$ 851.39	approx 10 year lifetime
Free Product Storage	Free Product Storage Tank	Kennedy Tank & Manufacturing Co, Inc	8000-gal F-921											have not replaced
	Level Indicator													have not replaced
	Level Swich													have not replaced
	Temperature Sensor													have not replaced
Equalization System	Equalization Tank	Viatec, Inc.	OVF-120-8225-P		10' dia x 14' tall	7500 gal								have not replaced
	Mixer	Braun	3BTO-2 or 3BT02-45	30418										have not replaced
	Equalization Pump	Goulds - Centrifugal	3642		1/2 hp	20 GPM	1				Grainger	9/29/2011	\$ 654.75	approx 10 year lifetime
	Swing Check Valve for Pump		Swing Check Valve, 1 In, FNPT, PVC				1	1			Grainger	9/29/2011	\$ 11.03	approx 10 year lifetime
	Coupler for Pump	Tarby						1						have not replaced

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	Level Indicator													have not replaced	
	HI/HI Level Switch													have not replaced	
	EQ Pump VFD													have not replaced	
	EQ Flow Meter													have not replaced	
Coagulation System	Coagulant Reaction Tank	Viatec, Inc.	OVF-72-1895-P		6' dia x 9' tall	1250 gal								have not replaced	
	Ferric Feed Pump	Watson Marlow	620DU or 624DU/R				1				Watson Marlow	4/19/2010	\$ 6,388.00	approx 10 year lifetime	
	Mixer VFD													have not replaced	
	Mixer	Braun	TX02 56140	706496100					Apr-14			Apr-14		replaced mixer motor	
	pH Probes	Foxboro	873 PH-AIWCGZ transmitter/871 PH-2A1A-7 probe				2		11/3/2008		Invensys Process Systems	9/15/2011	\$ 752.84	3 year lifetime, with bulb replacement every year.	
	pH Ceramic Replacement Parts	Foxboro	22703				2	2	3/30/2009		Invensys Process Systems	6/3/2010	\$ 95.00	1 year lifetime	
	pH Electrode Protective Sleeves	Foxboro	0051189				3	3			Invensys Process Systems	2/15/2008	\$ 58.00	approx 10 year lifetime	
Flocculation System	Flocculent Reaction Tank	Viatec, Inc.	OVF-60-1175-P		5' dia x 8' tall	900 gal								have not replaced	
	Mixer	Braun	TX02 56140	7064961003										have not replaced	
	Mixer VFD													have not replaced	
Polymer System	Polymer System	Nijhuis	NMA 1000L						12/19/2007		Nijhuis Water Technology, Inc.			approx 10 year lifetime	
	Polymer Feed Pump ("make up pump")	Allweiller AG	ADBPD4.3EX1P01	7620586			1				Nijhuis Water Technology, Inc.	11/14/2011	\$ 3,945.00	approx 10 year lifetime	
	Poly Feed Pump Stator	Allweiller AG	HPS P1 G000					1			Nijhuis Water Technology, Inc.	11/14/2011	\$ 475.00	approx 10 year lifetime	
	Dosing Pump ("neat bucket pump")	Moyno	B2ASSQ31AAAS7602903FL	31004401					Jul-12		Peacock			approx 10 year lifetime	
	Dosing Pump Sensor						1				Pumping Solutions	8/1/2011	\$ 924.95		
	Neat Tank													have not replaced	
	Mix Tank													have not replaced	
	Level Sensors													have not replaced	
	Stator	Allweiller AG	HPS P1G000			7 gal			9/25/2008		Nijhuis Water Technology, Inc.	11/14/2011	\$ 475.00	3 year lifetime	
DAF System	Control Panel CPU	Allen Bradley-SLC 500	1746P1				1		Jan-14		Holt Electrics	8/18/2008	\$ 358.15	approx 10 year lifetime, replaced main power supply unit due to electrical storm	
	DAF System	Nijhuis	IPF045E											have not replaced	
	Recirculation Pump	Flowserve	MK3STD size 1K1 SX1-82/700RV						11/30/2007					have not replaced	
	Skimmer Motor	Nord	NL-2180AC HILLEGOM 100340399600	SK 02050AZBD-RV10871L			1		Apr-14		Power Mation	2/13/2008	\$ 2,064.96	replaced motor and oiler	
	DAF Starter for Polymer Mixer	SPRECHER and SCHUH	KTA7-25S-1.6A				1				Power Mation	8/27/2008	\$ 154.00	approx 10 year lifetime	
	DAF Sump Pump	Hydromatic Sewage Pump	SK50M1			0.5 hp	1				R.C Worst Company	8/9/2011	\$ 415.00	approx 10 year lifetime	
	DAF Pump Tank	Viatec, Inc.	OVF-60-1028-P											have not replaced	
	Level Sensor								Oct-13					replaced HI/LOW level sensor in hopper	
	HI/HI Level Switch													have not replaced	
	Turbidity Meter	Tuthill	DDS.38EET2NM-71	0103100246674/001					2012						approximate 10 year lifetime
	Turbidity Meter Lamp	Hach	1895000				1		5/10/2010		Hach	8/12/2010	\$ 36.34	approx 10 year lifetime	
	Turbidity Meter Closure Drain	Hach	4411600								Hach	8/12/2010	\$ 10.38	approx 10 year lifetime	
	GAC Feed Pump	Gusher Pump	PC L 1.5 x365EHCBM-C or PCL1.5X365EHCBM-C	1303-605					5/1/2011		Anderson Pump and Process	5/18/2011	\$ 4,289.00		
	GAC Feed Pump VFD													have not replaced	
	Turbidity Glass Tube Flowmeter	Brooks	1110DG51C4EAA				1				Controls Plus	1/25/2008	\$ 870.00	approx 10 year lifetime	
Turbidity Flowmeter R-6-25-B Glass Tube	Brooks	S925G380WAA				1		1/25/2008		Controls Plus	8/14/2008	\$ 175.00	needs replacement often		

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	Turbidity Flowmeter Inlet Packing	Brooks	589B082TDA				1				Controls Plus	1/25/2008	\$ 75.00	approx 10 year lifetime	
	Turbidity Flowmeter Outlet Packing	Brooks	589B083TDA				1				Controls Plus	1/25/2008	\$ 75.00	approx 10 year lifetime	
	Turbidity Flowmeter Tube Seat Gasket	Brooks	375C087VAA				2				Controls Plus	1/25/2008	\$ 35.00	approx 10 year lifetime	
	Turbidity Meter Masterflex Tubing		06404-70				1				Cole Parmer	12/1/2009	\$ 160.00	approx 10 year lifetime	
	Turbidity Flowmeter Oring	Brooks	375B015SUA				2				Controls Plus	1/25/2008	\$ 5.00	approx 10 year lifetime	
	Friction Disk for Skimmer Motor	Nord	7911 90 20				1				Power Mation	5/13/2008	\$ 260.00	approx 10 year lifetime	
	Friction Ring Carrier for Skimmer Motor	Nord	791902200				1				Power Mation	6/10/2008	\$ 180.00	approx 10 year lifetime	
	Couplers		FIG 00808B/FIO 00808B/GSP 00806N				10					Global Wastewater Solutions	10/12/2009	\$ 216.60	approx 10 year lifetime
	Solenoid Valve	Burkert	456414J			120 Volt	1	1				Durable Controls	10/26/2009	\$ 52.87	approx 10 year lifetime
GAC System	Bag Filters	Krystil Klear Filtration	50 micron Particulate Filters								Anderson Pump and Process		\$ 382.00	approx 10 year lifetime, have old spares on site, have spare gaskets on site.	
	2,500 lb vessel	Carbonair	PC-20											have not replaced, reline one a year	
	Bag filter gasket	Krystil Klear	88LV Viton Lid Gasket, 88BV Viton Basket Gasket				8		11/3/2008		KTH SALES, INC.	11/3/2008	\$ 224.28	approx 10 year lifetime	
	10,000 vessel	Carbonair	PC-50											have not replaced	
	Laterals	Carbonair	PC-20				16				Carbonair	10/14/2009	\$ 38.00	have not replaced	
	Poly Sheets	Quick Solid Pad 4 X 500									Cetco	9/21/2009	\$ 585.00	approx 10 year lifetime	
	Backwash pump	Flowsolve Durco MarkIII		0305-5772		200 GPM	1		5/16/2011		PSI Engineering LLC	5/16/2011	\$ 5,091.00		
	Shaft Coupler Insert for Backwash pump	Grainger	6JE Sleeve	1L805			4	3	12/17/2008		Grainger	1/19/2009	\$ 17.28	approx 10 year lifetime	
	Viton Lid Gasket	Krystil Klear Filtration	88LV				4				KTH Sales	11/3/2008	\$ 30.89	approx 10 year lifetime	
	Viton Basket Gasket	Krystil Klear Filtration	88BV				4				KTH Sales	11/3/2008	\$ 23.17	approx 10 year lifetime	
	Butterfly Valve	Asahi	3730040							see notes	Indelco	9/22/2009	\$ 193.45	replaced on GAC1 and prefilter in March 2014 and will replace on GAC2 in July 2014	
	L/O T/O Valves		30560				2				LSS	5/28/2009	\$ 9.78	approx 10 year lifetime	
	Manway yokes, bolts and nuts	Carbonair	PC-50				2	1			Carbonair	6/25/2010	\$ 1,492.00	approx 10 year lifetime	
	Lateral Supports and Clamps	Carbonair	PC-50				set of 18		3/1/2014		Carbonair	1/12/2012	\$ 2,175.00	replaced in lead, lag and prefilter (as needed during carbon changeout), put a new diffuser on GAC1 in March 2014	
	Lateral Supports and Clamps	Carbonair	PC-20				set of 16		3/1/2014		Carbonair	1/12/2012	\$ 40.00	replaced in lead, lag and prefilter (as needed during carbon changeout), put a new diffuser on GAC1 in March 2014	
Manway 12 x 16 Gasket	Carbonair					6		7/5/2013		Carbonair	1/12/2012	\$ 450.00	replaced all manways (6) in 2013		
Drain	Carbonair	PC-50				2				Carbonair	9/10/2010	\$ 57.50	approx 10 year lifetime		
Differential Pressure Gauge	Moore	7MF4433-1HB22-1NC6-Z+A01+B21				1		1/28/2011		Siemens	11/30/2010	\$ 1,783.00	approx 10 year lifetime		
Neutralization System	Neutralization Tank	Viatec, Inc.	OVF-72-1895-P		6' x 9'	1260 gal								have not replaced	
	Caustic Feed Pump	Watson Marlow	624U or 624U/R								Drydon			approx 10 year lifetime	
	Mixer	Braun	BGMF-200	30420	2 hp; 230/460 v; 60 hz		1			2/11/2012	Liquid Process Equipment	2/10/2012	\$ 4,180.00	replaced mixer motor (April 2014)	
	pH Probes	Foxboro	873 PH-AIWCGZ transmitter/871 PH-2A1A-7 probe				1		4/8/2008	12/5/2008	Invensys Process Systems	10/21/2009	\$ 732.33	1 year lifetime	
	pH Probe Electrode	Foxboro	22510				2	1	9/24/2009		Invensys Process Systems	6/7/2010	\$ 140.00	1 year lifetime	
	pH Probe Sensor	Foxboro	871 PH-2A1A-7 probe				6			11/18/2010	Invensys Process Systems	11/17/2010	\$ 154.00	approx 10 year lifetime	
	pH Probe Reference Kit	Foxboro	871 PH-2A1A-7 probe				6			11/18/2010	Invensys Process Systems	11/17/2010	\$ 81.00	approx 10 year lifetime	
pH Electrode Protective Sleeves	Foxboro	0051189				3	4			Invensys Process Systems	2/15/2008	\$ 58.00	approx 10 year lifetime		

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Compressor Air System	Old Bldg Air Compressor	Curtis Toledo	E-71 or 7HT12	A50040106	6' x 9'	1260 gal								have not replaced, no longer in service
	Old Bldg Air Dryer	Hankison	HHL-90											have not replaced, no longer in service
	Air Compressor	ALMiG	Combi 16/20		31"x 78"	81 cfm at 125 psi	1		Jan-12		Applied Air Systems	1/17/2012	\$ 13,510.00	
	Service Kit for Air Compressor							1		6/28/2009	Clayhill	6/28/2009	\$ 549.96	approx 10 year lifetime
	Air Dryer	Hankison	DH-25											have not replaced
	Air Mufflers	4110 Element	1 01056 X 02706				3	1			Motion Industries	8/27/2008	\$ 17.13	approx 10 year lifetime
	Desicant	1/8" Activated Alumina	3146257			50 pound	4				Applied Air Systems	7/26/2011	\$ 107.00	Applied Air changes desicant every 3 years
Solenoids for Air Dryer	1/2" 2-way N/C, w/ junction box, spade 21778	J5F8210G094 AC 120/60, 110/50				2	1			Lesman Instrument	8/21/2008	\$ 137.00	approx 10 year lifetime	
Float Management	Float Storage Tank	Viatec, Inc.	OVF-120-6462-P		6' x 9'	1260 gal								have not replaced
	Mixer	Braun	3BTO-5 or 3BTO5-70	30418										have not replaced
	Level Sensor													have not replaced
	HI/HI Level Switch													have not replaced
	RDVF Feed Pump	Wilden	P2/SPPP/TS/TF/STF	SN0020474027					Oct-13					replaced in October 2013
Filtrate System	Filtrate Storage Tank	Viatec, Inc.	OVF-120-7050-P		10' dia x 12' tall	4200 gal								have not replaced
	Mixer	Braun	3BTO-2 or 3BTO2-70	30419										Mixer not in use, going to pull out of tank for use in other tanks as spare
	Level Sensor	Hydroranger	7ML50341AA01				1				Siemens	12/27/2011	\$ 1,352.00	approx 10 year lifetime
	HI/HI Level Switch					1 gpm								have not replaced
	Filtrate Pump	Continental	CP33-CSQMP	CP3056			1	1	2008	8/14/2010	Liquid Process Equipment	8/16/2010	\$ 885.00	replaced in 2012 and have a spare onsite from Anderson Pump and Process
	Coupler Inserts for Pump	Tarby	68514436384 (Item # 4WTW1)				2	1	1/28/2009		Grainger (Rob Orders)	10/12/2010	\$ 7.90	2 year lifetime
	Stator for Pump	Continental	U5-33Q				2	1	10/22/2010	7/30/2011	Anderson Pump and Process/Liquid Process	7/27/2011	\$ 31.00	appear to replace filtrate pump parts every 1-2 years
	Rotor for Pump	Continental	U5-33PTS				1		10/22/2010	7/30/2011	Anderson Pump and Process/Liquid Process	7/27/2011	\$ 131.00	1 year lifetime
	Shaft for Pump						1			10/22/2010	Liquid Process Equipment	10/22/2010	\$ 77.00	approx 10 year lifetime
	Bearings for Pump						2			10/22/2010	Liquid Process Equipment	10/22/2010	\$ 15.00	approx 10 year lifetime
	Mechanical Seal Assembly for Pump	Tarby	S200-0024				1		3/24/2010	10/22/2010	Anderson Pump and Process/Liquid Process	10/22/2010	\$ 20.00	0.5 year lifetime
	Flexible Joint-Buna for Pump	Tarby	S200-0023				1		3/24/2010	10/22/2010	Anderson Pump and Process/Liquid Process	10/22/2010	\$ 175.00	0.5 year lifetime
	Filtrate Pump VFD													approx 10 year lifetime
	Filtrate Pump Pin		320-4069-002				6				Liquid Process	12/23/2010	\$ 2.90	approx 10 year lifetime
	Filtrate Flow Meter													have not replaced
Filtrate Pump Y Strainer													have not replaced, has never gone bad, but needs to be cleaned often	
Control Panel CPU	Control Panel CPU	Allen Bradley-SLC 500	1746P2						1		Holt Electrics	8/18/2008	\$ 494.00	approx 10 year lifetime
	RDVF 3-way valve										DR Tech	5/9/2011	\$ 766.73	approx 10 year lifetime
	RDVF System	Alar	Model 360											have not replaced
	RDVF Furnance Blower Belt	Gates	Hi-Power II A47				2	1			Motion Industries	10/21/2009	\$ 6.46	approx 10 year lifetime
	Vacuum Pump, RDVF	Travaini	TRVA-65-300/G	1706					10/1/2013					approx 10 year lifetime
	DAF Float Pump	ARO/ Ingersol Rand	6661BF-344-C	Jo243419					Jun-12					replaced in 2012 (pump for the sump)
	Washdown Pump (RDVF)	ARO/ Ingersol Rand	66615X-X-C						2012					replaced washdown valve in 2012.
	Filter Aid Mixer	Lightnin	335/T1	G917117										have not replaced
	Recirculation Pump	Teel	IP852	598				1	11/30/2007					spare onsite, have not replaced

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RDVF	Valve Seats	Wilden	02-1120-03				8		10/13/2008		Anderson Pump and Process	11/4/2009	\$ 24.90	1 year lifetime
	Valve Teflon Balls	Wilden	02-1080-55				4		12/22/2008		Anderson Pump and Process	12/22/2008	\$ 16.50	
	Valve Stainless Steel Balls	Wilden	02-1-80-55		1"		8		12/22/2008		Anderson Pump and Process	11/4/2009	\$ 27.07	
	Valve Seals	Wilden	02-1200-55				8		10/13/2008		Anderson Pump and Process	11/4/2009	\$ 3.30	1 year lifetime
	Roller Screen	Alar							10/1/2013		Alar			Replaced October 2013
	Float Pump Chamber	Wilden	02-5000-03				2		11/11/2008		Anderson Pump and Process	11/4/2009	\$ 551.90	1 year lifetime
	Float Pump Diaphragm	Wilden	02-1010-52				6		2009	1/11/2010	Anderson Pump and Process	1/11/2010	\$ 33.30	1 year lifetime
	Float Pump Inlet House	Wilden	02-5080-03								Anderson Pump and Process			have not replaced
	Float Pump Disk Manifold	Wilden	02-5020-03								Anderson Pump and Process			have not replaced
	Float Pump Air Valve	Wilden	01-2010-20				1				Anderson Pump and Process	12/8/2009	\$ 143.50	approx 10 year lifetime
	Float Pump A/V Gasket	Wilden	01-2615-52				1				Anderson Pump and Process	12/8/2009	\$ 3.30	approx 10 year lifetime
	Float Pump Ring	Wilden	02-3210-55-225				2				Anderson Pump and Process	12/8/2009	\$ 8.00	approx 10 year lifetime
	Float Pump Gasket	Wilden	01-3505-52				1				Anderson Pump and Process	12/8/2009	\$ 4.20	approx 10 year lifetime
	Float Pump Washer	Wilden	02-6802-08				2				Anderson Pump and Process	12/8/2009	\$ 1.20	approx 10 year lifetime
	Float Pump Inner Piston	Wilden	02-3701-01				2				Anderson Pump and Process	12/8/2009	\$ 18.20	approx 10 year lifetime
	Float Pump Piston	Wilden	02-4550-01				2				Anderson Pump and Process	12/8/2009	\$ 20.20	approx 10 year lifetime
	Float Pump Muffler	Wilden	01-3181-20				1				Anderson Pump and Process	11/24/2009	\$ 16.00	approx 10 year lifetime
	Float Pump Center Section	Wilden	02-3145-20				1				Anderson Pump and Process	11/24/2009	\$ 253.10	approx 10 year lifetime
	Float Pump Pilot Assembly	Wilden	02-3880-99				1				Anderson Pump and Process	12/8/2009	\$ 95.50	approx 10 year lifetime
	Float Pump O-Ring	Wilden	01-2395-52				1				Anderson Pump and Process	12/8/2009	\$ 1.10	approx 10 year lifetime
	Float Pump End Cap	Wilden	01-2332-20				1		12/23/2009		Anderson Pump and Process	12/23/2009	\$ 4.50	approx 10 year lifetime
Float Pump Snap Ring	Wilden	00-2650-03				2				Anderson Pump and Process	12/8/2009	\$ 7.80	approx 10 year lifetime	
Float Pump Shaft	Wilden	02-3810-03				1				Anderson Pump and Process	12/8/2009	\$ 78.00	approx 10 year lifetime	
Tilt Float Switch in Recirc. Tank	ATT006		24453/000001				2				Global Water	10/27/2008	\$ 45.00	approx 10 year lifetime
Chemical Storage	Ferric Sulfate Storage Tank	Safe-Tank	8700-gallon								Poly Processing Co.			approx 10 year lifetime
	Caustic Storage Tank	Safe-Tank	8700-gallon								Poly Processing Co.			approx 10 year lifetime
	Level Sensor													have not replaced
	HI/HI Level Switch													have not replaced
	Temperature Sensor													have not replaced
	Leak Detection													have not replaced
	Heating Pads													have not replaced
	Ferric Tank Diaphragm Valve		1-2521-TM-903				1				Swanson Flo-Systems	8/21/2009	\$ 453.00	approx 10 year lifetime
	Heat Tracer								Jan-13				\$400	replaced winter 2012

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HVAC	Odorous Air Fans						2	2						replaced motors as needed (usually once every 2 years, 2 motors are spares on site), belts are replaced as needed (2 times per year)
	Make Air Units (Main Process Room)	Reznor	RDF-2-80											belts are replaced as needed. Motor drive was replaced in 2013.
	Make Air Units (RDVF Room)	Reznor	RDF-1-40											not operational
	Electric Unit Heater	Trane	UHEC-IM-7A				5		2013					Wall units, there are 5 onsite. RDVF room unit replaced in 2013. Replace heating coils as needed.
	Exhaust fan													have not replaced
	Odorous Air Belts (long)							5		9/29/2011				approx 10 year lifetime
	Odorous Air Belts (medium)							3		9/29/2011				approx 10 year lifetime
	Odorous Air Belts (short)							3		9/29/2011				approx 10 year lifetime
Building Misc	Old Bldg Sump Level													have not replaced
	Plant Drain Sump Pumps						1		2012					Replaced in 2012.
	Plant Drain Sump Level Sensors													have not replaced
	Gas Regulator on Propane Tank						1		2011		Daniels Plumbing	9/29/2011	\$ 1,137.52	Replaced in winter 2011
	Monitoring Well Name Plates		42285				50				Seton	6/4/2008	\$ 168.10	approx 10 year lifetime
	Propane Pilot Light							1						Yearly inspection. Was replaced 2011.
	Furnace Pilot Light							1						Replaced in 2010.
	Furnace Power Light Bulbs							6						Replaced as needed - every couple of years.
	Thermostat							1						Replaced in 2014.
	Generator	Generac Power Systems					1		Aug-09		North Country Plumbing and Heating		\$3,100	New battery put in 2013. Inspected every year.
	Hydropneumatic Tank													have not replaced
	Temper Tank	Amtrol	WX-457-C											have not replaced
	Safety Showers													have not replaced, tested every month.
	Backflow preventor	Watts	919QTS				1		2/18/2010		C3D Testing Company	2/18/2010	\$ 1,004.59	approx 10 year lifetime, inspected every December
	Outside Light Bulbs							8						Replaced as needed - every couple of years.
	Sanitary Holding Tank Level Switch													have not replaced
	Reignitor Kit (40/40H & 80/40H) for propane tank		3-8683				2		5/1/2012		LPG & NH3 Supply	10/16/2008	\$ 251.37	3 year lifetime, replaced 2012
NAPL Socks	Soakease	TB2-110			2 inch	12	8				Durham Geo Slope Indicator	4/19/2010	\$ 111.00	
NAPL Canisters	Soakease	TB2-101			2 inch	4					Durham Geo Slope Indicator	4/19/2010	\$ 152.50	approx 10 year lifetime

Notes:

All level switches/sensors/trees are the Hydroranger 2000 which is very expensive; replace as needed, no spares on site.

For all pH probes/turbidity meter - have extra bulbs and sensors on site.

Air Compressor Systems: On warranty and service with Applied Air Systems in MN. Service every 2000 hours.

Entire RDVF System is supplied/replaced/maintained via Alar.