

Operating Data

PRESSURE SEWER SERVICES AUSTRALIA PTY LTD

ABN – 61962159053

PO Box 119

Hallam, Victoria

3803

LPS System Repairs & Service Calls Annual Report

Report Period 1/7/2005 to 30/6/2006	Number of Pump Units Installed	Year of Installation	Total Number of service calls to the LPS System	Number of service calls as a result of pump components failure (see note 1)	Number of service calls to faults not attributed to pump or reticulation system (see note 2)	Number of service calls to faults or repairs to reticulation (see note 3)	Average cost to maintain & repair each pump in system per annum (\$AUD)
Tooradin	273	Nov 2001	30	19	10	1	65.68
Warneet	241	Aug 2003	25	14	9	2	67.63
Cannons Creek	200	Dec 2003	9	7	2	Nil	61.00
Bittern	3	Jun 2004	Nil	Nil	Nil	Nil	Nil
Portsea	4	Nov 2004	Nil	Nil	Nil	Nil	Nil
Narre Warren	2	Jun 2005	Nil	Nil	Nil	Nil	Nil
Somers	2	Sept 2005	Nil	Nil	Nil	Nil	Nil
Total	725		64	40	21	3	\$64.77average per pump per annum

Note 1 – Pump component failure includes all faults associated with the pump unit including: pump, control panel and tank

Note 2 – Service calls to faults not attributed to pump or system reticulation include such things as: low voltage relay operation (i.e. low voltage in power supply), home owner has accidentally turned off the circuit breaker to the pump unit, blocked house drain.

Note 3 – This includes repairs to the reticulation system as a result of accidental damage to the system and or flushing of system.

LPS Pump Failure Modes

Failure Modes	Number
Stator & Rotor Worn	1
Stator only (worn or run dry)	8
Stator replaced – but other fault (typically electrical fault) caused pump failure	3
Electrical component failure including – motor contactor, control assembly	6
Electrical hood flooded, hood seal failed, all electrical components replaced	6
Motor Failure – motor replacement	3
Low Voltage Relay Failure – replaced on site	2
Pressure Switch Failure – not caused by hood flooding	8
Blockage – pump cavity blocked by nappy wipes, material and other foreign matter	5
Other – split check valve on pump	1

WEATHERBY LAKE, MISSOURI

O & M DATA – 1988 THRU 2003

George Lowman
Director of Public Works
Weatherby Lake, MO
816-741-5545

Weatherby Lake is one of the largest and oldest grinder pump low pressure sewer systems in the United States. The system started installation in 1974 with approximately 320 grinder pump stations. Today, there are approximately 620 grinder pump stations in service. There is an average of 10 to 15 new homes added to the system each year.

We have the dollar figures for the parts that were purchased by Weatherby Lake for the years 1988 through 2003. They are as follows:

1988	\$12,775.08	1994	\$15,400.62	2000	\$38,468.98
1989	\$10,449.17	1995	\$15,997.74	2001	\$27,778.80
1990	\$7,003.93	1996	\$31,520.20	2002	\$33,082.52
1991	\$10,588.79	1997	\$18,766.36	2003	\$26,223.82
1992	\$20,931.58	1998	\$34,233.98		
1993	\$21,354.88	1999	\$25,125.12		

According to George, an average of 300 man-hours per year, or 25 hours per month, is spent on the pressure sewer system. The labor cost for this time is \$3,300.00 annually.

Parts:	\$26,223.82
Labor:	\$3,300.00
TOTAL	<u>\$29,523.82</u>

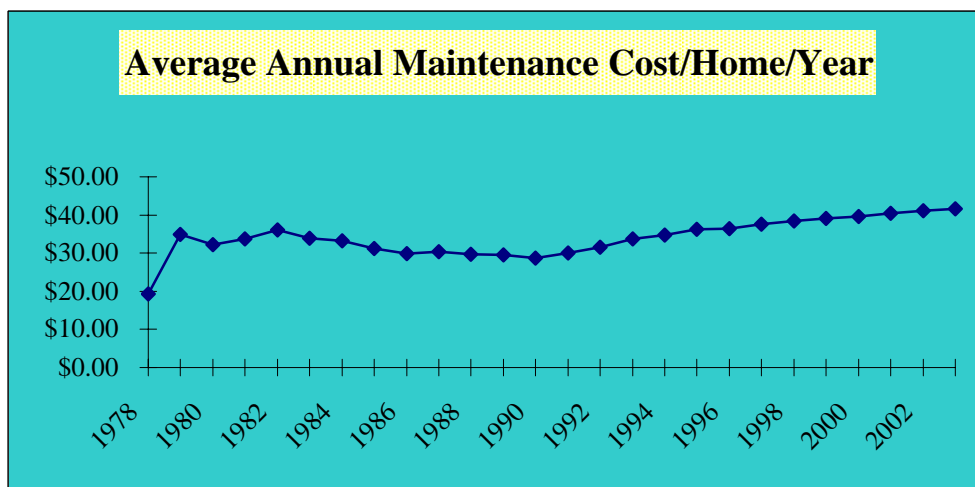
\$29,523.82 divided by 620 = \$47.62 per pump annually for O & M.

FAIRFIELD GLADE, TENNESSEE

Barry Field, Director of Public Works
Fairfield Glade, Inc.
931-484-3780

LOG OF ANNUAL AVERAGE MAINTENANCE COST FOR ENVIRONMENT ONE GRINDER PUMPS

YEAR	NUMBER OF PUMPS @ 1ST OF YEAR	NEW PUMPS INSTALLED THIS YEAR	AVERAGE ANNUAL O&M COST	ROLLING AVERAGE O&M COST
1978	20	21	\$19.23	\$19.23
1979	41	43	\$50.45	\$34.84
1980	84	29	\$27.18	\$32.29
1981	113	36	\$38.17	\$33.76
1982	149	35	\$45.29	\$36.06
1983	184	51	\$23.52	\$33.97
1984	235	81	\$28.98	\$33.26
1985	316	87	\$16.84	\$31.21
1986	403	73	\$19.68	\$29.93
1987	476	115	\$34.43	\$30.38
1988	591	66	\$22.51	\$29.66
1989	657	63	\$27.16	\$29.45
1990	720	72	\$20.16	\$28.74
1991	792	117	\$47.50	\$30.07
1992	909	72	\$53.31	\$31.62
1993	981	95	\$65.81	\$33.76
1994	1076	101	\$50.29	\$34.73
1995	1177	139	\$60.55	\$36.17
1996	1316	99	\$41.50	\$36.45
1997	1415	140	\$60.24	\$37.64
1998	1555	148	\$54.18	\$38.43
1999	1703	133	\$52.23	\$39.06
2000	1827	131	\$51.89	\$39.61
2001	1958	125	\$57.45	\$40.36
2002	2083	172	\$59.53	\$41.12
2003	2255	86	\$52.73	\$41.56



**A one year summary of the maintenance activity for 900 Environment-One pumps at
Pierce County, installed in 1984. Information compiled from 11/94 through 11/95**

Total amount spent on rebuilding of pump cores in shop; parts and labor	\$16,190.59
Total amount spent on maintenance other than routine or alarm calls	\$3,843.69
Total amount spent on routine maintenance checks	\$3,691.48
Total amount spent on red light alarm call outs	\$6,625.61
 Total number of pumps in system	 900
Total number of red light emergency calls for year	59
Total number of pumps rebuilt in shop	51
Total number of pumps replaced in field	46
Total number of routine maintenance checks performed	190
 Total average cost per year per pump, with routine checks	 \$33.72
Total average cost per year per pump, without routine checks	\$29.62
 Total manhours used to maintain 900 grinder pumps	 1178.40
Total manhours divided by 2 people	589.20
Total 40 hour weeks for 2 people to maintain 900 pumps	14.73
Total months required for 2 full time employee's to maintain 900 pumps	3.68