

PETERS TOWNSHIP SANITARY AUTHORITY
BRUSH RUN WPCP LABORATORY
DMRQA STUDIES
PERFORMANCE REPORT

Study Year	Analyte	PTSA Results	True Value	Acceptable Range	Evaluation
2006	CBOD ₅	12.7 mg/L	13.5 mg/L	6.02 - 21 mg/L	Acceptable
2007	CBOD ₅	27.5 mg/L	28.4 mg/L	12.7 - 44.1 mg/L	Acceptable
2008	CBOD ₅	93.2 mg/L	117 mg/L	52.5 - 182 mg/L	Acceptable
2009	CBOD ₅	32.4 mg/L	41.1 mg/L	18.4 - 63.8 mg/L	Acceptable
2010	CBOD ₅	49.8 mg/L	54.5 mg/L	24.4 - 84.6 mg/L	Acceptable
2011	CBOD ₅	105.7 mg/L	110 mg/L	49.5 - 171 mg/L	Acceptable
2012	CBOD ₅	133 mg/L	120 mg/L	53.9 - 186 mg/L	Acceptable
2013	CBOD ₅	151 mg/L	125 mg/L	56.1 - 194 mg/L	Acceptable
2014	CBOD ₅	80.1 mg/L	85.4 mg/L	39.5 - 131 mg/L	Acceptable
2006	Ammonia Nitrogen	12.3 mg/L	12.3 mg/L	9.13 - 15.3 mg/L	Acceptable
2007	Ammonia Nitrogen	1.65 mg/L	1.83 mg/L	1.24 - 2.53 mg/L	Acceptable
2008	Ammonia Nitrogen	7.19 mg/L	7.55 mg/L	5.55 - 9.51 mg/L	Acceptable
2009	Ammonia Nitrogen	7.84 mg/L	8.52 mg/L	6.28 - 10.7 mg/L	Acceptable
2010	Ammonia Nitrogen	15.7 mg/L	16.6 mg/L	12.4 - 20.5 mg/L	Acceptable
2011	Ammonia Nitrogen	5.97 mg/L	6.86 mg/L	5.03 - 8.66 mg/L	Acceptable
2012	Ammonia Nitrogen	16.8 mg/L	18.5 mg/L	13.8 - 22.8 mg/L	Acceptable
2013	Ammonia Nitrogen	10.2 mg/L	9.6 mg/L	7.10 - 12.0 mg/L	Acceptable
2014	Ammonia Nitrogen	9.15 mg/L	9.33 mg/L	7.41 - 11.2 mg/L	Acceptable
2006	pH	5.6 s.u.	5.59 s.u.	5.39 - 5.79 s.u.	Acceptable
2007	pH	6.2 s.u.	6.18 s.u.	5.98 - 6.38 s.u.	Acceptable
2008	pH	6.39 s.u.	6.46 s.u.	6.26 - 6.66 s.u.	Acceptable
2009	pH	9.34 s.u.	9.30 s.u.	9.10 - 9.50 s.u.	Acceptable
2010	pH	7.54 s.u.	7.53 s.u.	7.33 - 7.73 s. u.	Acceptable
2011	pH	7.98 s.u.	7.98 s.u.	7.78 - 8.18 s.u.	Acceptable
2012	pH	7.28 s.u.	7.31 s.u.	7.11 - 7.51 s.u.	Acceptable
2013	pH	6.30 s.u.	6.24 s.u.	6.04 - 6.44 s.u.	Acceptable
2014	pH	8.29 s. u.	8.28 s.u.	8.08 - 8.48 s.u.	Acceptable
2006	Total Suspended Solids	57.5 mg/L	70.2 mg/l	56.6 - 78.7 mg/L	Acceptable
2007	Total Suspended Solids	34.6 mg/L	39.6 mg/l	29.6 - 46.2 mg/L	Acceptable
2008	Total Suspended Solids	54 mg/L	51.6 mg/l	40.2 - 58.9 mg/L	Acceptable
2009	Total Suspended Solids	88 mg/L	93.3 mg/l	77 - 103 mg/l	Acceptable
2010	Total Suspended Solids	92 mg/L	93.8 mg/l	77.4 - 104 mg/L	Acceptable
2011	Total Suspended Solids	62 mg/L	64.2 mg/L	51.3 - 72.3 mg/L	Acceptable
2012	Total Suspended Solids	53 mg/L	56.1 mg/L	44.2 - 63.7 mg/L	Acceptable
2013	Total Suspended Solids	83 mg/L	86.8 mg/L	71.2 - 96.4 mg/L	Acceptable
2014	Total Suspended Solids	48 mg/L	53.6 mg/L	41.9 - 61.21 mg/l	Acceptable
2006	Total Residual Chlorine	0.55 mg/L	0.64 mg/L	0.465 - 0.807 mg/L	Acceptable
2007	Total Residual Chlorine	1.31 mg/L	1.43 mg/L	1.03 - 1.77 mg/L	Acceptable
2008	Total Residual Chlorine	0.89 mg/l	0.93 mg./L	0.671 - 1.16 mg/L	Acceptable

2009	Total Residual Chlorine	0.65 mg/L	0.70 mg/L	0.507 - 0.88 mg/L	Acceptable
2010	Total Residual Chlorine	1.97 mg/L	2.09 mg/L	1.49 - 2.57 mg/L	Acceptable
2011	Total Residual Chlorine	0.86 mg/L	0.932 mg/L	0.672 - 1.16 mg/L	Acceptable
2012	Total Residual Chlorine	1.66 mg/L	2.02 mg/L	1.44 – 2.49 mg/L	Acceptable
2013	Total Residual Chlorine	1.17 mg/L	1.34 mg/L	0.96 – 1.66 mg/L	Acceptable
2014	Total Residual Chlorine	1.24 mg/L	1.30 mg/L	0.96 – 1.54 mg/L	Acceptable
2006	Fecal Coliform	133 #/100 ml	190 #/100 ml	13 - 2800 #/100 ml	Acceptable
2007	Fecal Coliform	260 #/100 ml	440 #/100 ml	12 - 2200 #/100 ml	Acceptable
2008	Fecal Coliform	138 #/100 ml	1230 #/100 ml	114 - 2470 #/100 ml	Acceptable
2009	Fecal Coliform	143 #/100 ml	203 #/100 ml	40 - 1040 #/100 ml	Acceptable
2010	Fecal Coliform	93 #/100 ml	73 #/100 ml	12 - 443 #/100 ml	Acceptable
2011	Fecal Coliform	23 #/100 ml	37 #/100 ml	8 -180 #/100 ml	Acceptable
2012	Fecal Coliform	13 #/100 ml	61 #/100 ml	4 -209 #/100 ml	Acceptable
2013	Fecal Coliform	225 #/100 ml	479 #/100 ml	42 – 1240 #/100 ml	Acceptable
2014	Fecal Coliform	225 #/100 ml	707 #/100 ml	57 – 1520 #/100 ml	Acceptable

1 mg/L is the equivalent of 1 minute in 2 years or 1 inch in 16 miles