System Performance Data - YMCA Camp Shady Brook

In addition, here are some quick system facts and a legend for the wastewater characteristics.

Quick Facts

Building / Facilities: **Recreational Camp**
Start-up: **Jun-01**
Location: **Deckers, CO**
Designer / Engineer: **Church & Associates**
Contractor / Installer: **SRC Excavating**
Regulating Authority: **State of Colorado**
Design Flows: **12,000 GPD**
Grease Tank: **1,500 gallons**
Septic Tank: **26,000 gallons**
Recirculation Tank: **13000 gallons**
Filters: **6000 sq. ft. RSF**
Actual Loading Rate (gpd/ft2): **0.3583**
System Configuration: **Mode 1**
Discharge: **Surface to 4-Mile Creek**

Legend

BOD5: Biochemical Oxygen Demand (*5 day, uninhibited*)
cBOD5: Carbonaceous Biochemical Oxygen Demand (*5 day, inhibited*)
TSS: Total Suspended Solids
TKN: Total Kjeldahl-Nitrogen (*Organic and Ammonia Nitrogen*)
NH3-n: Ammonia-Nitrogen
NO2-n: Nitrite-Nitrogen
NO3-n: Nitrate-Nitrogen
NOx: Nitrite + Nitrate
TN: Total Nitrogen = (TKN) + (NO3-n) + (NO2-n)
DO: Dissolved Oxygen
pH: Measure of acidity, 7 is neutral. Wastewater w/value <5 or >9 are difficult to treat biologically
Alk: Alkalinity
TP: Total Phosphorus
G&O: Grease and Oil
FC: Fecal Coliform
Values reported as less than

Notes: Ultraviolet Disinfection
Data taken from DMR's provided by operator.

		Septic Tank Effluent											
Date	**GPD**	**BOD5**	**TSS**	**TKN**	**NH3**	**NO3**	**NOx**	**TN**	**pH**	**Alk**	**TP**	**G&O**	**FC**
Sep-01	1000	400	301										
Oct-01	1000	529	174										
May-02	500	442	1200										
				Forest Fire Closes Camp									
Jun-03	900	526	452										
Jul-03	800	496	942										
Aug-03	3000	1268	547										
Jun-04	4500	420	117										
Jul-04	5000	210	400										
Aug-04	2400	487	656										
Sep-04	1000	359	137										
Jun-05	2000	59	50										
Jul-05	1000	542	695										
Aug-05	6000	553	921										
Sep-05	1000	554	628										
AVE:	**2150**	**489**	**516**										

	Filtrate Effluent										
BOD5	**TSS**	**TKN**	**NH3**	**NO3**	**NOx**	**TN**	**pH**	**Alk**	**TP**	**G&O**	**FC**
0	0		0.1								0
2	6		0.2								0
0	0		1								0
0	0		2.9								0
0	0										
0	0		0.4								0
4	0		0.3								10
8	2		0.3								10
0	0		0.4								0
5	5		0.1								3
5	5		0.2								0
5	5										400
6	8										540
5	5										3
3	**3**		**1**								**74**