System Performance Data - Blue Jay Café and Lodge - AdvanTex Treatment System

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

Quick Facts

Building / Facilities: **Lodge and restaurant**
Start-up: **Aug-03**
Location: **Telluride, CO**
Designer / Engineer: **Buckhorn Geotech**
Contractor / Installer: **Williams Construction**
Regulating Authority: **State of Colorado**
Design Flows: **8540 GPD**
Grease Tank: **6,000 gallons**
Septic Tank: **20,000 gallons**
Recirculation Tank: **10,000 gallons**
Filters: **Sixteen AX20's**
Actual Loading Rate (gpd/ft2): **4.5**
System Configuration: **Mode 1**
Discharge: **Chlorine disinfection and surface discharge**

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

Notes:

		Influent											
Date	GPD	BOD5	TSS	TKN	NH3	NO3	NOx	TN	pH	Alk	TP	G&O	FC
Aug-03	500	400	150										
Sep-03	1800	395	186										
Oct-03	1400	490	158										
Nov-03	1400	560	668										
Dec-03	1800	1500	5330										
Jan-04	1300	460	530										
Feb-04	1600	233	120										
Mar-04	1200	460	280										
Apr-04	1300	345	128										
May-04	1300	335	280										
Jun-04	2200	253	170										
Jul-04	1600	435	348										
Aug-04	1600	445	256										
Sep-04	1400	650	314										
Oct-04	900	399	380										
Nov-04	900	535	368										
Dec-04	1400	223	118										
Jan-05	1100	600	384										
Feb-05	1200	295	152										
Mar-05	1400	1950	216										
Apr-05	400	990	1330										
May-05	1600	275	146										
Jun-05	1900	325	324										
Jul-05	2000	180	96										
Aug-05	2000	180	116										

	Filtrate Effluent										
BOD5	TSS	TKN	NH3	NO3	NOx	TN	pH	Alk	TP	G&O	FC
<5	6										160
<5	6										*0*
13	4										*0*
7	<5										*0*
<5	8										*0*
29	5										16
14	<5										2
15	9										8
18	5										0
10	<5										0
18	<5										740
28	82										0
11	10										0
8	<5										0
5	<5										116
11	5										0
6	13										0
23	5										4
<5	6										72
9	<5										27
20	<5										0
<5	7										0
9	<5										2
8	<5										0
<5	8		3.5								0

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Sep-05	2100	263	108										11	<5		3.6							0
Oct-05	1500	190	156										20	8		0.57							
Nov-05	300	118	57																				
Dec-05	1400	415	300										<5	<5		1.78							0
Jan-06	1700	198	216										5	<5		0.37							230
Feb-06	1400	325	288										11	6		6.25							14
Mar-06	1600	350	166										7	6		0.62							0
Apr-06	200	133	26																				
May-06	2300	570	67										11	<5		0.53							13
Jun-06	3500	285	232										13	<5		4							0
Jul-06	1200	340	184										17	<5		0.62							0
Aug-06	1500	220	37										9	<5		0.37							0
Sep-06	1700	168	100										8	<5		4.32							0
Oct-06	1100	323	198										13	<5		4.6							0
Nov-06	500	260	264																				
Dec-06	1700	343	452										3.38	<5		3.38							0
AVE:	**1437**	**425**	**376**										**13**	**11**		**2**							**38**