System Performance Data - C Lazy U Ranch

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

Quick Facts

Building / Facilities: **Resort and Working Ranch**
Start-up: **Jul-03**
Location: **Granby, Colorado**
Designer / Engineer: **Church & Associates**
Contractor / Installer: **Owner**
Regulating Authority: **State of Colorado**
Design Flows: **21,562 GPD**
Grease Tank: **Two- Grease Traps Pre-existing**
Septic Tank: **Two- 10,000 Gallon Tanks**
Recirculation Tank: **20,000 Gallons**
Filters: **4000 Sq. ft. RSF**
Actual Loading Rate (gpd/ft2): **1.7**
System Configuration: **Mode 3**
Discharge: **Surface discharge to Willow 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
Reported as less than

Notes: Data provided by system operator

		INFLUENT											
Date	GPD	BOD5	TSS	TKN	NH3	NO3	NOx	TN	pH	Alk	TP	G&O	FC
7/28/2003	10310	70	458										
8/11/2003	12230	581	171										
9/29/2003	6120	247	368										
10/1/2003	6620	396	72										
11/25/2003	6280	267	222										
12/22/2003	5340	116	74										
1/29/2004	4550	90	57										
2/16/2004	3230	128	72										
3/15/2004	4380	123	48										
4/20/2004	4880	158	179										
5/24/2004	5260	197	164										
6/21/2004	9700	181	79										
7/27/2004	10120	313	165										
AVE:	**6848**	**221**	**164**										

		EFFLUENT											
Date	GPD	BOD5	TSS	TKN	NH3	NO3	NOx	TN	pH	Alk	TP	G&O	FC
7/28/2003	10310	11.2	3										10
8/11/2003	12230	15.9	6										10
9/29/2003	6120	16.1	20										10
10/1/2003	6620	9.7	2										10
11/25/2003	6280	6.3	3										10
12/22/2003	5340	3.8	4										10
1/29/2004	4550	6.4	2										10
2/16/2004	3230	2.3	3										10
3/15/2004	4380	2.1	2										10
4/20/2004	4880	1.9	2										10
5/24/2004	5260	5.4	4										10
6/21/2004	9700	3.5	22										26
7/27/2004	10120	4.6	16										12
AVE:	**6848**	**7**	**7**										**11**