

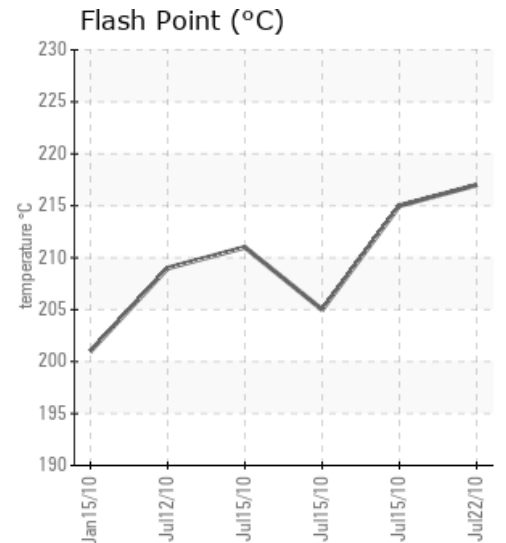
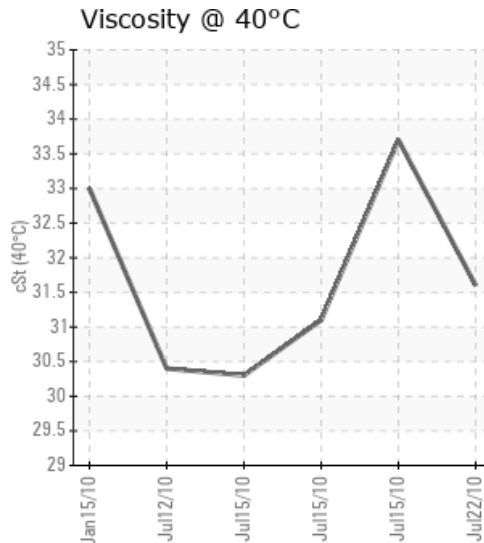
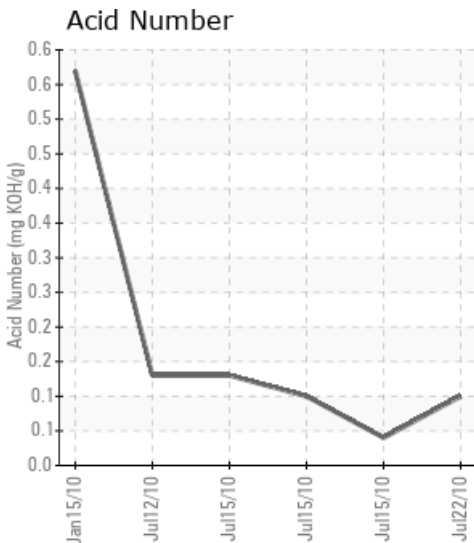
[Disto Oil Loop] SILANE 4.0 DISTILLATION

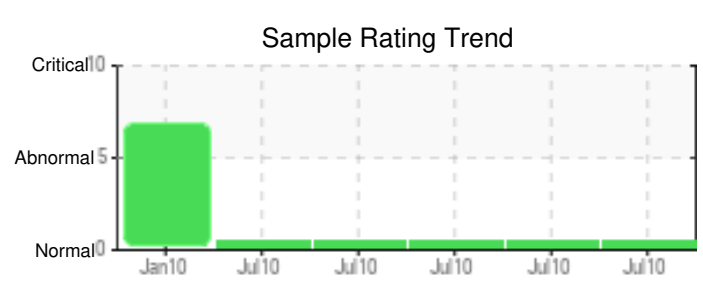
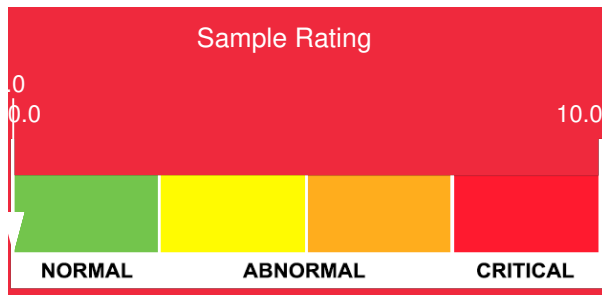
Customer: PTRHTF10093	System Information	Sample Information
REC GROUP 3322 ROAD N N.E. MOSES LAKE, WA 98837 USA Attn: Sam Bright Tel: (509)766-8902 E-Mail: sam.bright@recsilicon.com	System Volume: 50000 gal Bulk Operating Temp: 420F / 216C Heating Source: Blanket: Fluid: Make: COEN	Lab No: I-V04443 Analyst: Gaston Arseneault Sample Date: 07/22/10 Received Date: 07/23/10 Completed: 07/29/10 To discuss this report contact Gaston Arseneault at 973-986-6503

Recommendation: This bottom of tank sample does not look as bad as the previous bottom of tank sample from 7/15. There was not enough sample to run the GCD.

Comments: Not enough sample to complete all testing; Otherwise, no abnormal findings. Chlorine Results: <50 ppm; Sample information has been added or tests have been rerun or additional testing was added and the report has been regenerated;

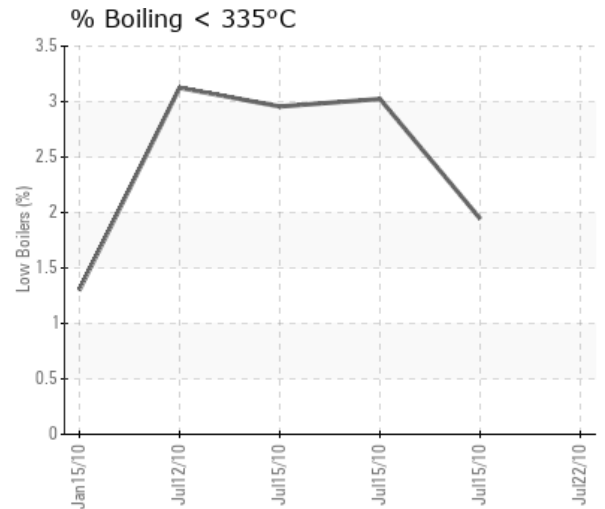
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
07/22/10	07/23/10		VAPORIZER OUTLET	426 / 219	175	31.2	0.1	0.026	691 / 366	793 / 423	896 / 480	2.56
07/22/10	07/23/10	3m	BOTTOM OF TANK	423 / 217	35	31.6	0.1	0.011				
07/15/10	07/16/10	3m	NEW OIL	419 / 215	123	33.7	0.04		688 / 364	784 / 418	878 / 470	1.945
07/15/10	07/16/10	3m	PUMP DISCHARGE	401 / 205	45	31.1	0.1	0.039	686 / 363	786 / 419	875 / 469	3.024
07/15/10	07/16/10	3m	BOTTOM OF TANK	412 / 211	272	30.3	0.13	0.115	687 / 364	786 / 419	876 / 469	2.956
07/12/10	07/13/10	3m	4.0 SILANE HOT OIL S	408 / 209	108	30.4	0.13		685 / 363	784 / 418	874 / 468	3.125
Baseline Data												





Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
07/22/10	4	0	0	0	0	0	0	1	0	0	7	0	3	0	0	0	0	0	0	0	1	0	7	0
07/22/10	6	0	0	0	0	0	1	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	7	0
07/15/10	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	221	3
07/15/10	6	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	0	0	0	0	9	0
07/15/10	7	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	9	0
07/12/10	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	8	0
Baseline Data																								

Elemental analysis results (above) in parts per million (ppm). [10,000 ppm = 1.0%]



Historical Comments	
07/22/10	This bottom of tank sample does not look as bad as the previous bottom of tank sample from 7/15. There was not enough sample to run the GCD.
07/15/10	The oil looks like new Calflo AF.
07/15/10	We will ask for chlorine testing on the tank bottom sample. Tank bottom appears to have more solids (oil insoluble material), more water but not more acidic
07/15/10	Wait for next sample for comparison
07/12/10	A process leak and contamination from left-over water from the initial pressure testing have been identified. This sample shows a higher Acid Number than fresh oil in such a short time, which may indicate the presence of acids (hydrochloric or sulfuric). The silicon is 4 ppm. Chlorine test was performed and the result was < 50 ppm. Water content is 108 ppm which is only about twice what fresh oil normally has. New samples are on their way so let's monitor the leak.

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