

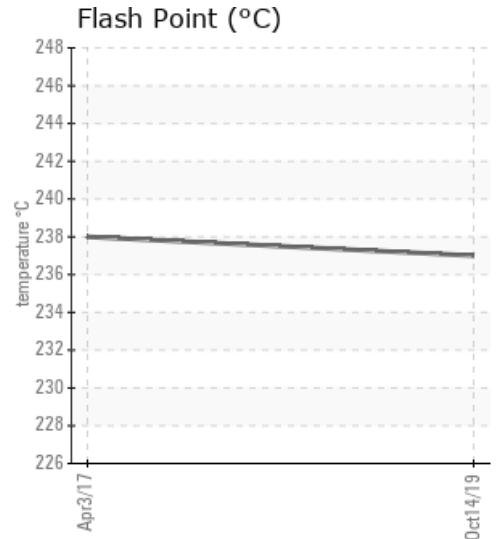
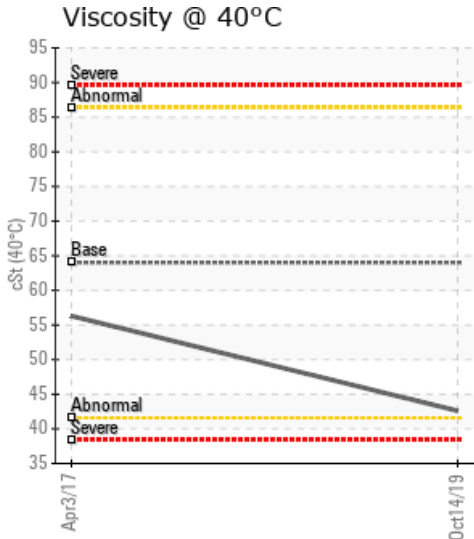
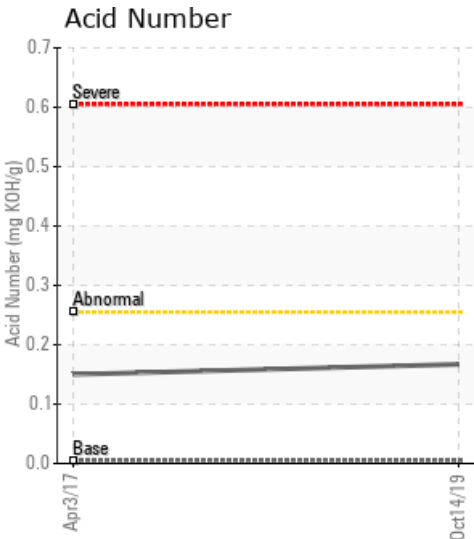
FULTON

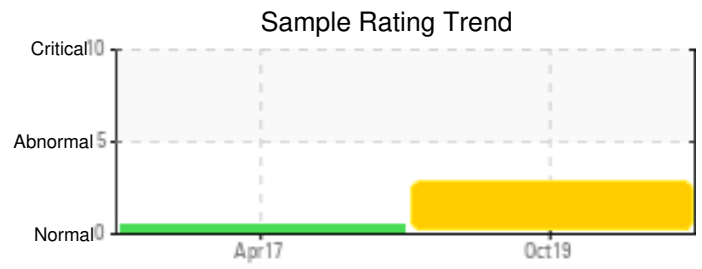
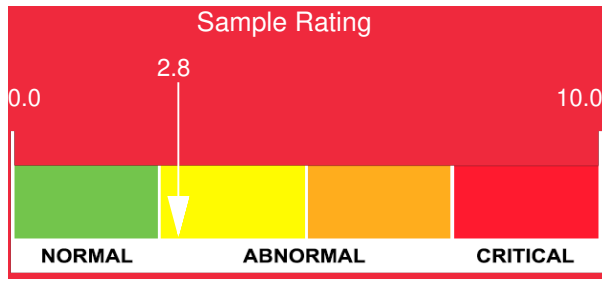
Customer: PTRHTF10186	System Information	Sample Information
Bitumar USA Inc 7982 Huey Road Douglasville, GA 30134 USA Attn: Mike Walsh Tel: E-Mail: mike.walsh@bitumar.com	System Volume: 0 gal Bulk Operating Temp: 380F / 193C Heating Source: Blanket: Fluid: SHELL THERMIA OIL C Make: FULTON	Lab No: 02315204 Analyst: Manny Garcia Sample Date: 10/14/19 Received Date: 10/18/19 Completed: 10/29/19

Recommendation: Fluid is safe to top up with premium 'virgin' Petro-Therm heat transfer Fluid. Condition of the existing fluid/age may warrant a full fluid change-out.

Comments: (GCD) 90% Distillation Point is severely low. (GCD) 10% Distillation Point is marginally low.

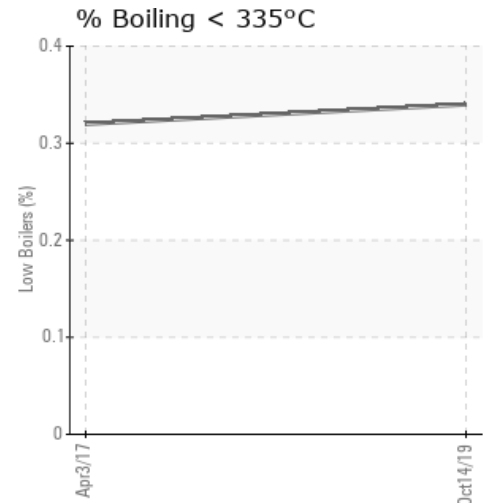
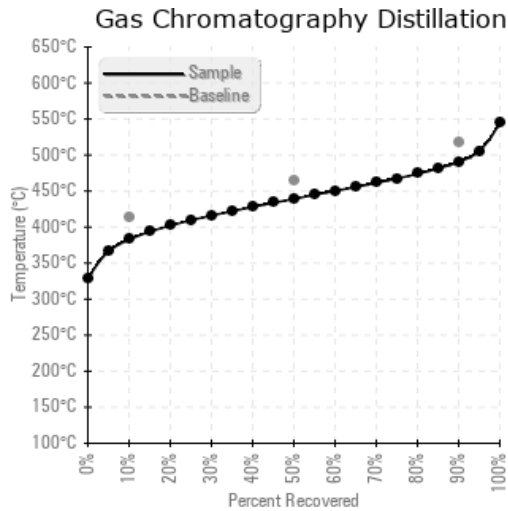
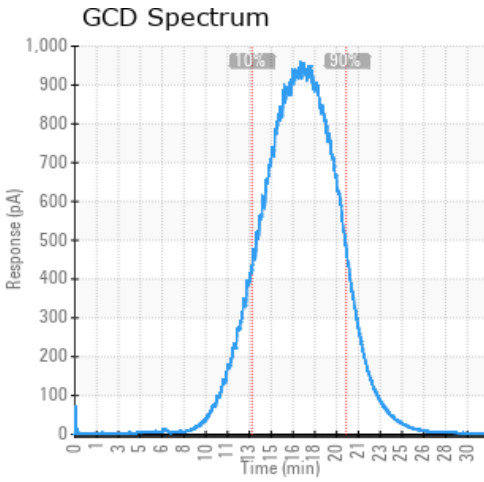
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
10/14/19	10/18/19	0y		459 / 237	0.00	42.6	0.167	0.222	721 / 383	823 / 439	915 / 490	0.34
04/03/17	04/24/17	15y	PUMP SUCTION	460 / 238	13.9	56.3	0.150	0.042	744 / 396	866 / 463	965 / 519	0.32
Baseline Data				500 / 260		64	0.005		777 / 414	867 / 464	964 / 518	0.00





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		
10/14/19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	12	0	12	13		
04/03/17	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Baseline Data																										
			0	0						0			0	0					0				0			

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



Historical Comments	
04/03/17	Heat Transfer fluid appears to be suitable for continued use; If the system has filters, please maintain/change asap or during a shutdown, filter the oil thru a kidney loop system to maintain cleanliness levels. Re-submit sample in 12 months. Wear metals are low; contaminant levels are low; Water is satisfactory at 13.9ppm; distillation curves are acceptable; pentane insoluble are low; COC flash point is satisfactory; very light white metal visible in the fluid sample; very light debris visible

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