

## B05-58/B05HOU34

**Customer: PTRHTF10011**  
 G.F.S. CHEMICAL  
 851 Mckinley Avenue  
 COLUMBUS, OH 43222 USA  
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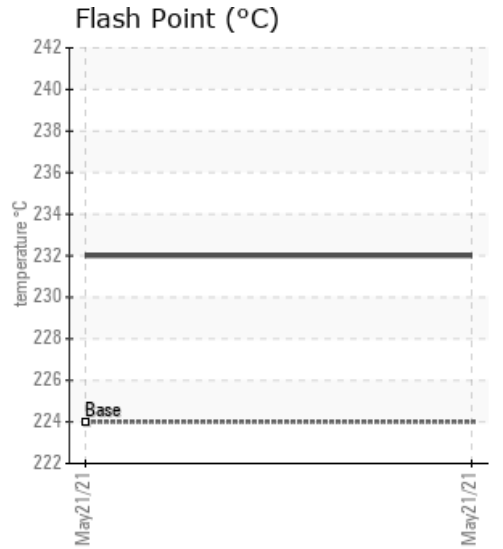
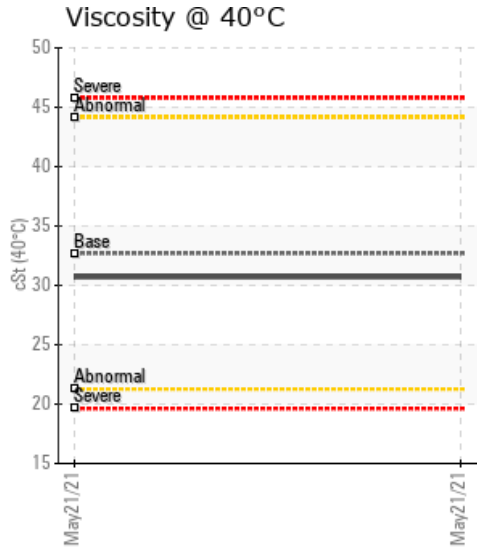
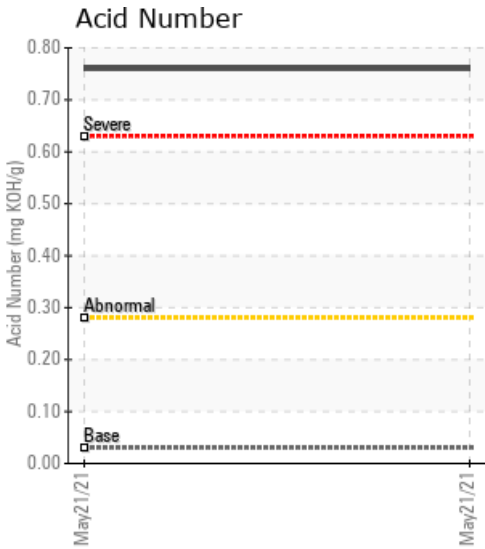
**System Information**  
 System Volume: 40 gal  
 Bulk Operating Temp: 350F / 177C  
 Heating Source:  
 Blanket:  
 Fluid: PETRO CANADA CALFLO AF  
 Make: MOKON

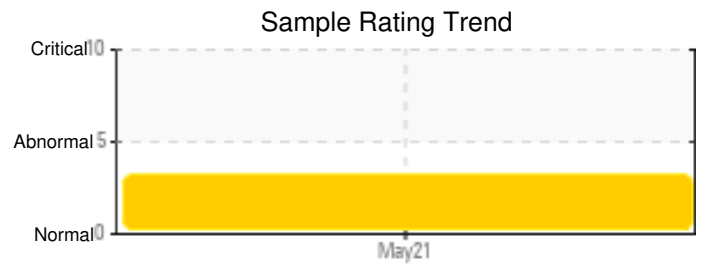
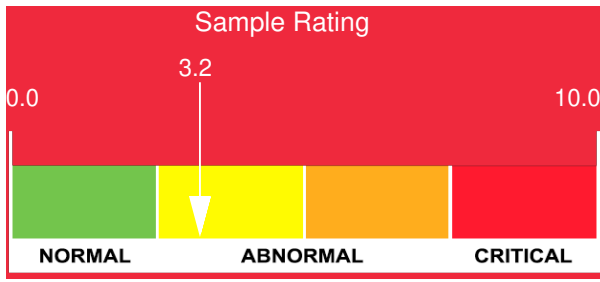
**Sample Information**  
 Lab No: 02448263  
 Analyst: Joe Goecke  
 Sample Date: 05/21/21  
 Received Date: 10/05/21  
 Completed: 10/08/21  
 Joe Goecke  
 joe.goecke@hollyfrontier.com

Recommendation: Acid number on this sample is in the high range. I recommend a partial or full change of the fluid to prevent more fluid break down. Varnish and other byproducts can foul the system and cause other problems like filter and valve plugging. This could have come from contamination but without knowing we recommend some change before next sample.

Comments: Acid Number (AN) is severely high.

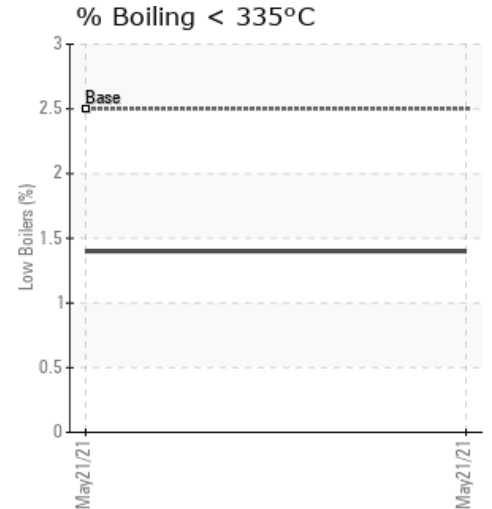
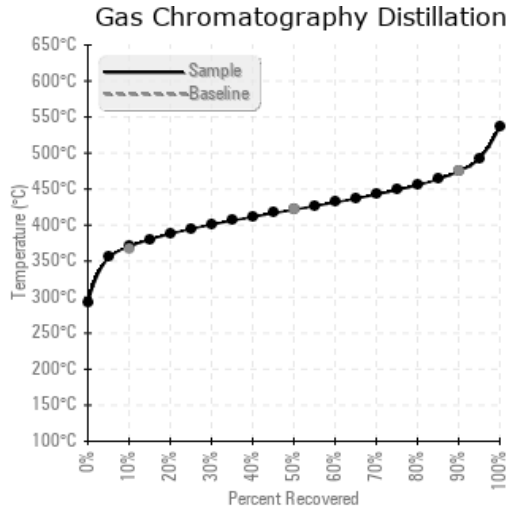
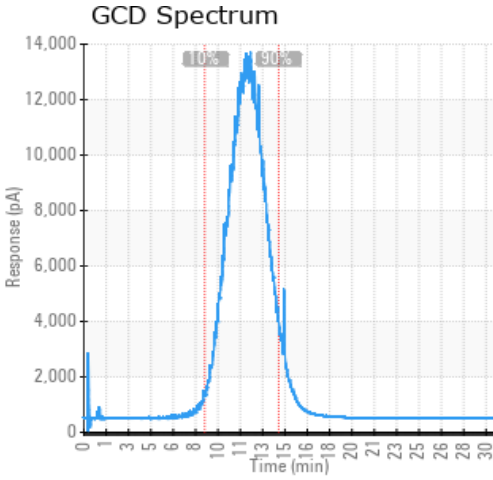
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
05/21/21	10/05/21	15.0y		450 / 232	9.4	30.7	0.76	0.189	698 / 370	791 / 421	886 / 474	1.40
Baseline Data				435 / 224		32.7	0.03		693 / 367	790 / 421	887 / 475	2.5





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	
05/21/21	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	200	0	
<b>Baseline Data</b>				0	0					0			0	0					0					270	

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



### Historical Comments


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