

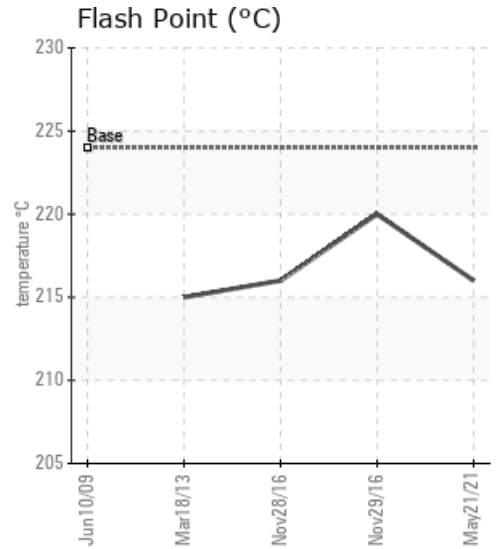
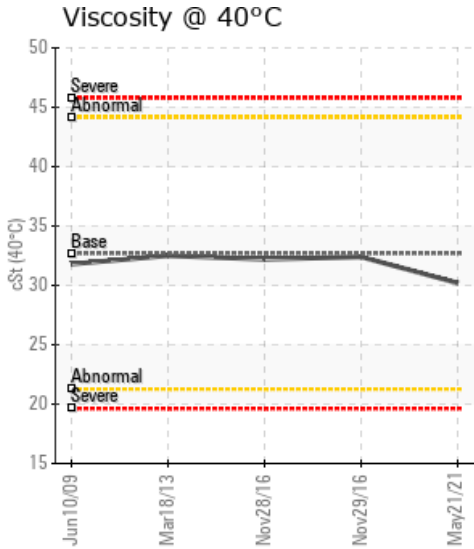
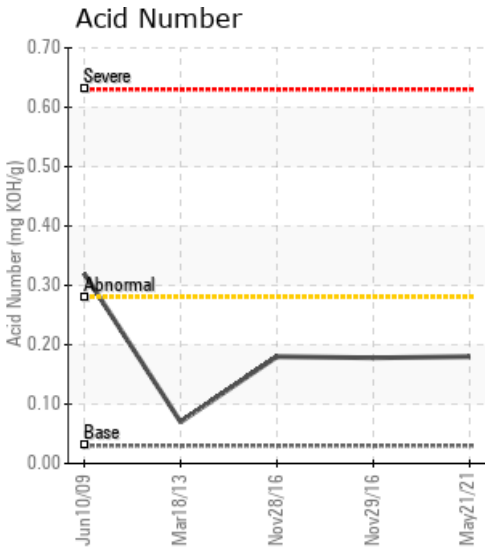
B05-12

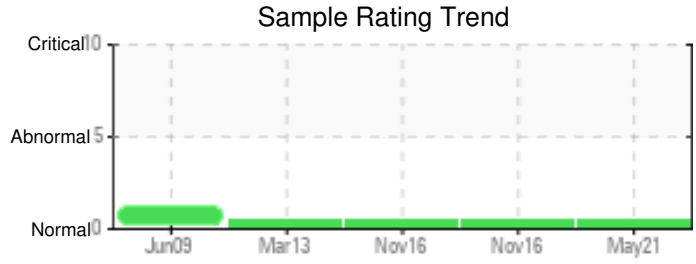
Customer: PTRHTF10011	System Information	Sample Information
G.F.S. CHEMICAL 851 Mckinley Avenue COLUMBUS, OH 43222 USA Attn: Jamie Walters Tel: (800)446-4910 E-Mail: jamie@gfscchemicals.com	System Volume: 75 gal Bulk Operating Temp: 350F / 177C Heating Source: Blanket: Fluid: PETRO CANADA CALFLO AF Make: CHROMALOX	Lab No: 02448275 Analyst: Joe Goecke Sample Date: 05/21/21 Received Date: 10/05/21 Completed: 10/12/21 Joe Goecke joe.goecke@hollyfrontier.com

Recommendation: Sample is in excellent condition, continue to use and resample at next scheduled interval.

Comments:

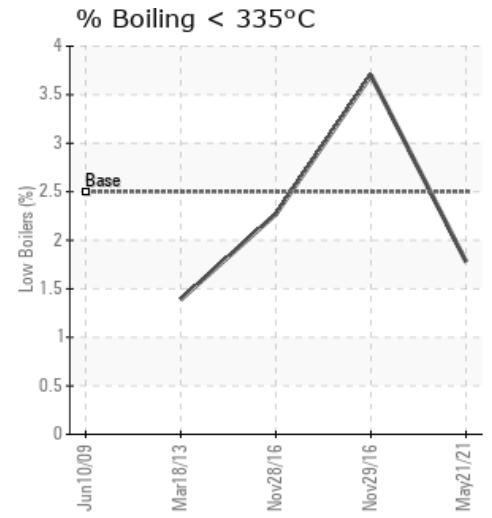
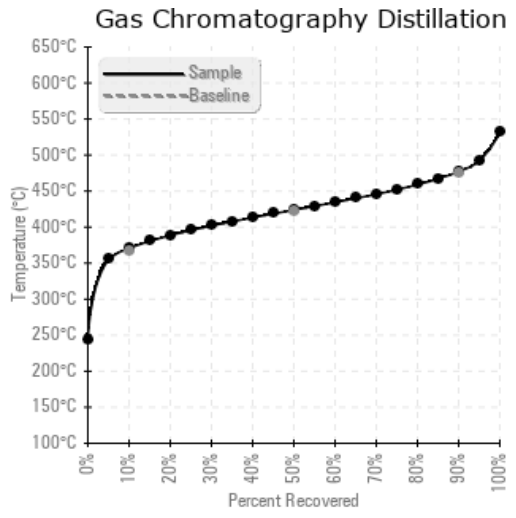
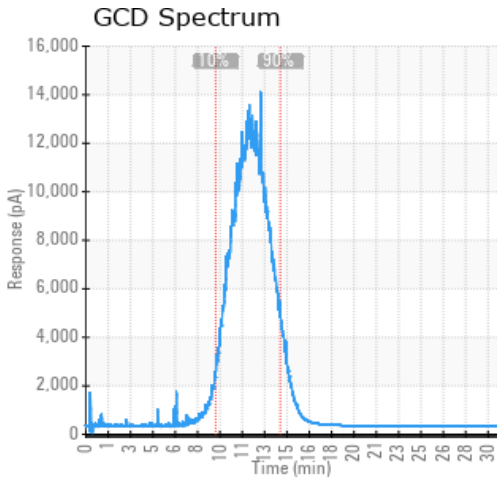
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
05/21/21	10/05/21	18.0y		421 / 216	32.9	30.2	0.18	0.097	699 / 371	795 / 424	891 / 477	1.78
11/29/16	12/20/16	0.0y		428 / 220	72.5	32.4	0.178	0.001	685 / 363	792 / 422	885 / 474	3.70
11/28/16	12/20/16	0.0y		421 / 216	11.9	32.2	0.180	0.068	687 / 364	786 / 419	878 / 470	2.27
03/18/13	03/28/13	0.0y	RECIRC LINE	419 / 215	35.6	32.5	0.07	0.119	698 / 370	795 / 424	889 / 476	1.39
06/10/09	06/10/09					31.8	0.32					
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	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62	0
11/29/16	34	0	0	0	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	99	0
11/28/16	68	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	113	0
03/18/13	43	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	109	0
06/10/09	18	0	0	0	0	0	1	0	0	0	10	0		0	0		0		0	0	0	0	48	0
Baseline Data			0	0						0			0	0					0				270	

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



Historical Comments	
11/29/16	Sample shows no issues, continue with use and resample at next scheduled interval
11/28/16	Sample shows no issues, continue with use and resample at next scheduled interval
03/18/13	The test results indicate the fluid is suitable for further use. Viscosity and flash point are just like fresh oil. Considering the oil is 10 years old however, if budget permits, it might not be a bad idea to replace the fluid and flush the system out if this unit is very critical to your operation.
06/10/09	

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