

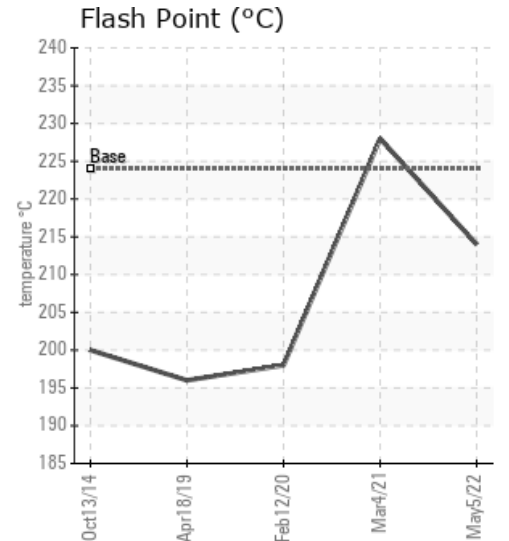
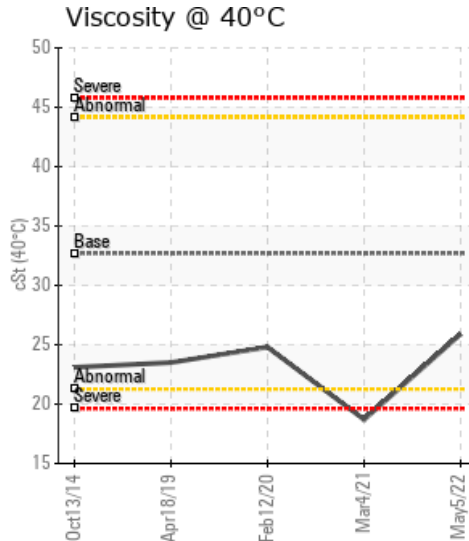
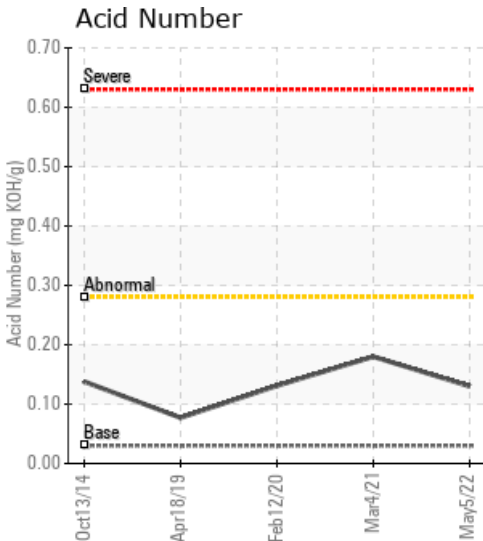
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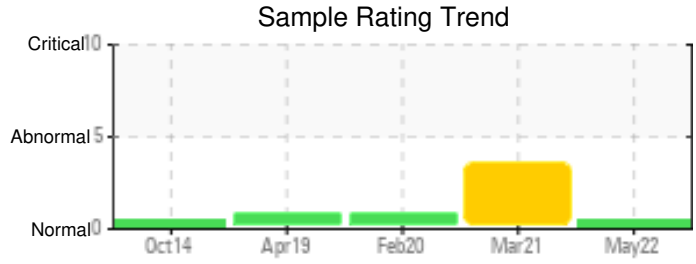
Customer: PTRHTF10057	System Information	Sample Information
PROPEX RINGGOLD PLANT 428 ROLLINS INDUSTRIAL BLVD RINGGOLD, GA 30736 USA Attn: STEWART DOMAINGUE Tel: (423)553-3843 E-Mail: stewart.domaingue@propexglobal.com	System Volume: 100 gal Bulk Operating Temp: 400F / 204C Heating Source: Blanket: Fluid: PETRO CANADA CALFLO AF Make:	Lab No: 02491694 Analyst: Jake Finn Sample Date: 05/05/22 Received Date: 05/31/22 Completed: 06/03/22 Jake Finn jake.finn@hollyfrontier.com

Recommendation: Sample indicates no signs of wear, contamination or fluid degradation. Viscosity has improved significantly since last sample (3/4/2021). This fluid is suitable for continued use, please resample and submit for testing in 12 months.

Comments: Very light debris noted by lab.

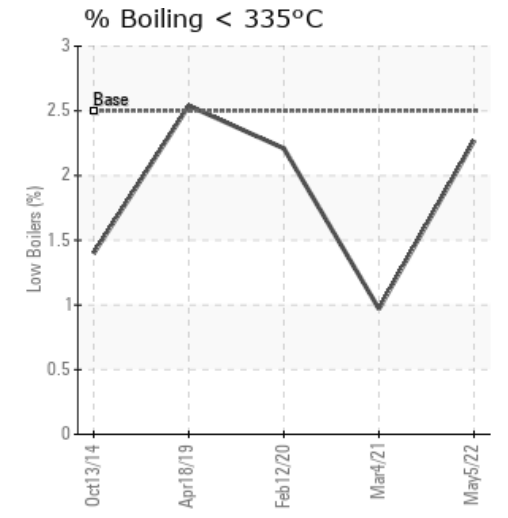
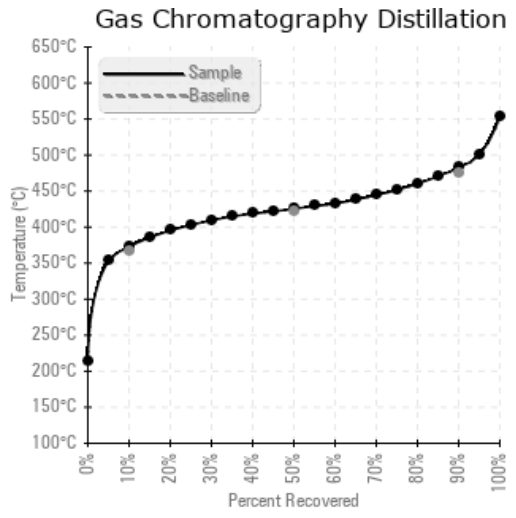
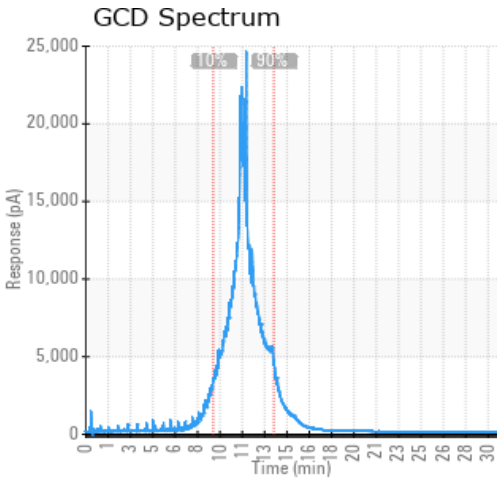
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
05/05/22	05/31/22	0.0h		417 / 214	31.5	25.9	0.13	0.082	703 / 373	798 / 425	901 / 483	2.27
03/04/21	03/16/21	0.0h		442 / 228	9.1	18.7	0.18	0.055	762 / 406	800 / 427	912 / 489	0.97
02/12/20	02/25/20	0.0h		388 / 198	4.0	24.8	0.131	0.105	703 / 373	815 / 435	916 / 491	2.21
04/18/19	05/14/19	0.0h		385 / 196	22.9	23.5	0.077	0.073	703 / 373	800 / 427	910 / 488	2.54
10/13/14	10/23/14	0.0h	RETURN LINE	392 / 200	19.0	23.1	0.138	0.104	693 / 367	799 / 426	910 / 488	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
05/05/22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	0
03/04/21	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0
02/12/20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	0
04/18/19	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	0
10/13/14	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	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	
03/04/21	*** Viscosity was run three times (18.7, 18.7, 19.1 cSt) *** Viscosity is about 15% lower than new oil should be. GCD 10% distillation point is high which may be a sign of oxidation, though acid number is acceptable. Fluid appears to be acceptable for continued use, but it is recommended to check for any fluid contamination sources that may be affecting the viscosity if possible. Please resubmit a new sample for testing in one year. (GCD) 10% Distillation Point is severely high. Visc @ 40°C is severely low. (GCD) 90% Distillation Point is marginally high.
02/12/20	Venting the system may help in improving the GCD 90% distillation point. Fluid otherwise is suitable for continued use. Please resubmit for testing in one year. (GCD) 90% Distillation Point is abnormally high. Very lite white metal and debris noted by lab.
04/18/19	Oil is suitable for continued use, please re-submit sample in 1 year. Changing any system filters or kidney-loop filtering the fluid during any shutdown periods will remove any 'light debris' as seen by the lab. Please remember to include hours of use on oil and age of hot oil system when submitting samples for testing.(GCD) 90% Distillation Point is marginally high. Light to Moderate debris is noted in lab comments. (GCD) 90% Distillation Point is marginally high.
10/13/14	The oil is suitable for further use, no alarming result or trend to report. Please try to sample every year to monitor fluid condition and plan proper oil change frequency rather than running an overextended fluid and being faced with a costly system cleaning and flushing. (GCD) 90% Distillation Point is marginally high.

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