

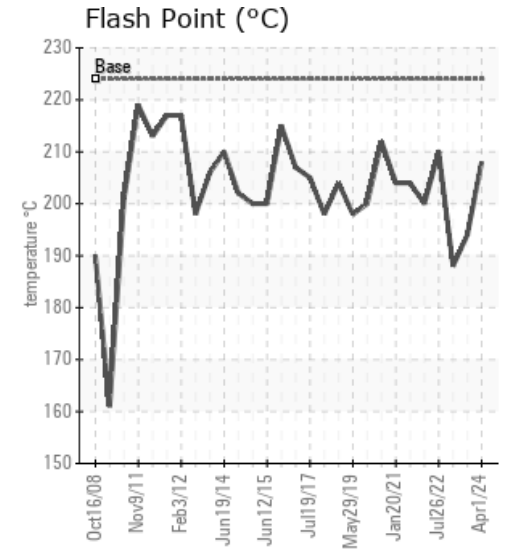
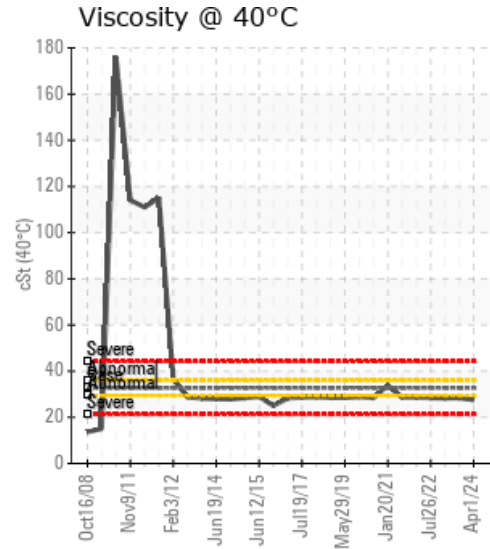
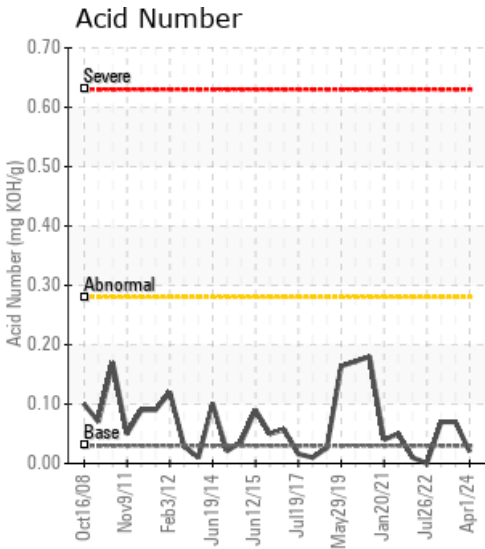
STILLYARD

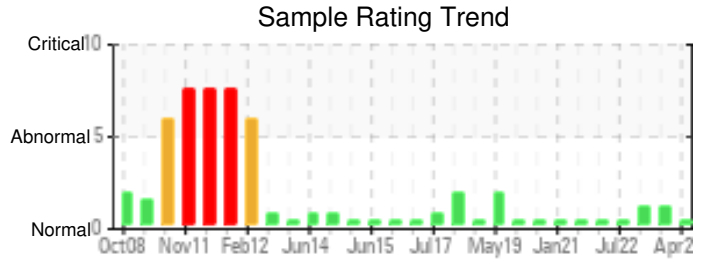
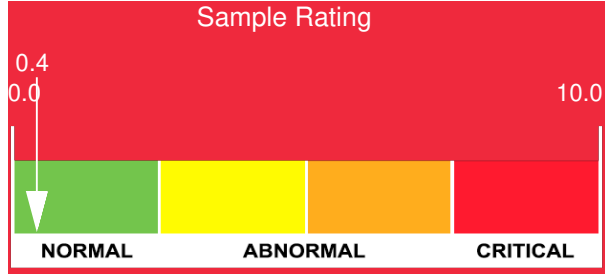
Customer: PTRHTF10068	System Information	Sample Information
Certainteed - Saint Gobain 1064 PLEASANT ST NORWOOD, MA 02062 US Attn: Marc Gelin Tel: (781)278-0466 E-Mail: marc.gelin@saint-gobain.com	System Volume: 3000 gal Bulk Operating Temp: 550F / 288C Heating Source: Blanket: Fluid: PETRO CANADA CALFLO AF Make: RW COOPER	Lab No: 02627759 Analyst: Greg Fernandez Sample Date: 04/01/24 Received Date: 04/09/24 Completed: 04/17/24 Greg Fernandez gregory.fernandez@hfsinclair.com

Recommendation: The fluid sample is in good overall condition and suitable for continued service. Distillation points are at very good levels and there are no signs of fluid degradation or contamination.

Comments: Viscosity slightly low but suitable for continued use. Recommend to resample at next regular fluid sample interval.

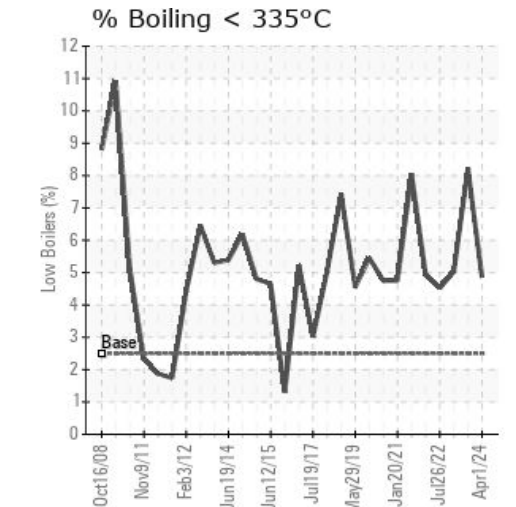
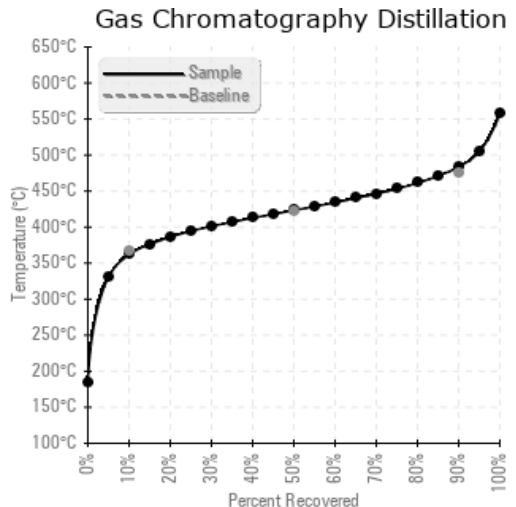
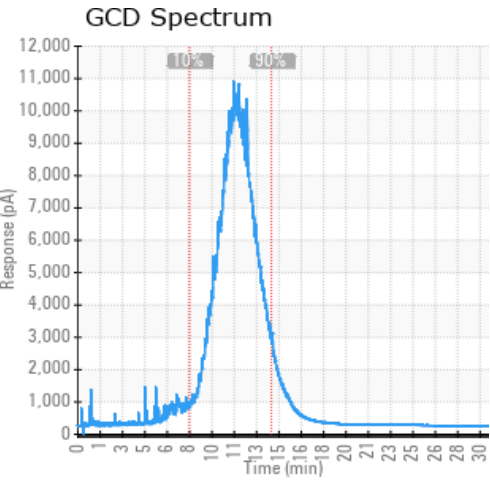
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
04/01/24	04/09/24	0.0y		406 / 208	8	27.5	0.02	0.074	684 / 362	794 / 423	902 / 484	4.86
05/11/23	05/24/23	2.5y		381 / 194	23.7	28.4	0.07	0.087	650 / 343	773 / 411	887 / 475	8.22
08/30/22	09/09/22	0.0y	suction to circ pump	370 / 188	14.6	28.3	0.07	0.077	684 / 362	794 / 424	902 / 483	5.03
07/26/22	08/04/22	10.0y	suct. to circ. pump	410 / 210	17.0	28.4	0.00	0.443	688 / 364	795 / 424	902 / 483	4.52
01/06/22	01/18/22	10.0y	suction to circ pump	392 / 200	13.9	28.6	0.01	0.089	684 / 362	793 / 423	901 / 483	4.94
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
04/01/24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	0
05/11/23	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	43	0
08/30/22	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	24	0
07/26/22	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	24	0
01/06/22	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	27	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	
05/11/23	The sample shows properties indicative of a fluid that is in good condition and suitable for continued service. The viscosity continues to report slightly low, as it has for the last several samples, but it is not at a level to be of concern. No indications of abnormal wear particles or contaminants identified for this sample. Visc @ 40°C is low. COC Flash Point is marginally low.
08/30/22	Sample results for the Stillyard are representative of a fluid in good condition. Viscosity, Acid Number, COC Flash Point and GCD are all at good performance levels. Recommend to continue service with this fluid and to sample at next normal sample interval. Visc @ 40°C is abnormally low. COC Flash Point is marginally low.
07/26/22	Sample results look overall good for this system with no concerns for low boiler results. Pentane Insolubles have risen noticeably and could merit checking filtration to assure that it is functioning properly. In general, system is suitable for continued service until the next scheduled sample interval. Pentane Insolubles levels are abnormally high. Visc @ 40°C is abnormally low.
01/06/22	Sample looks good, no issues to address. Continue to use as normal and resample and next scheduled interval

Petro-Canada makes no representation or warranty of any kind, either express or implied, as to the accuracy or completeness of the analysis and assumes no responsibility and shall have no liability whatsoever with respect to such analysis, or a party's use of it. Petro-Canada is a division of HollyFrontier Corporation.