

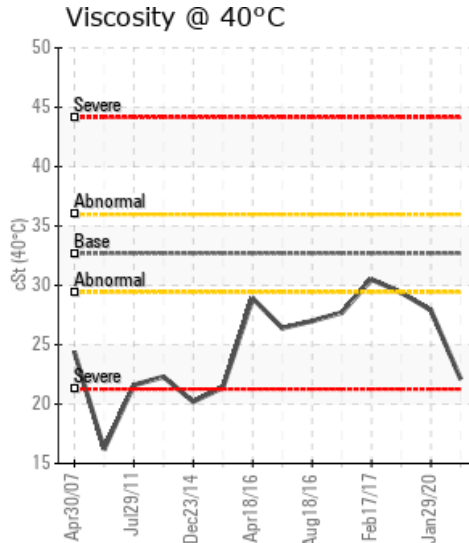
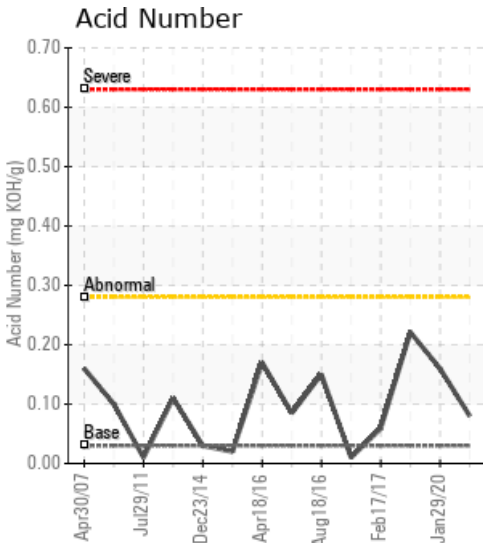
MAIN SYSTEM

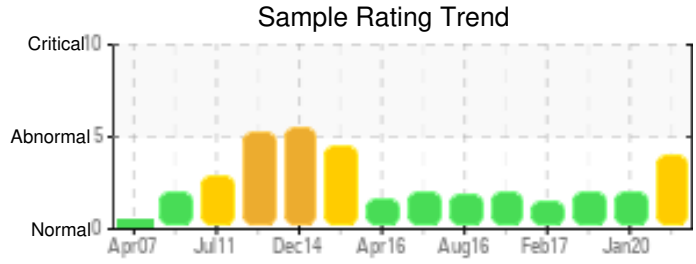
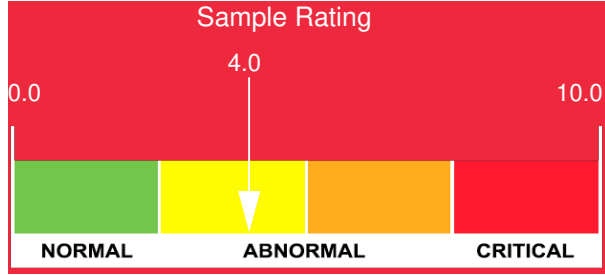
Customer: PTRHTF10067	System Information	Sample Information
CERTAINTEED - SAINT GOBAIN 620 AERO DRIVE SHREVEPORT, LA 71107 US Attn: Richard Howe Tel: (318)470-4769 E-Mail: richard.howe@saint-gobain.com	System Volume: 1350 gal Bulk Operating Temp: 450F / 232C Heating Source: Blanket: Fluid: PETRO CANADA CALFLO AF Make:	Lab No: 02606135 Analyst: Jake Finn Sample Date: 12/19/23 Received Date: 01/02/24 Completed: 01/05/24 Jake Finn jake.finn@HFSinclair.com

Recommendation: Sample has a low flash point, low viscosity @ 40C and GCD% < 335C is high. This indicates that there may be low boilers in the system, which can build up over time of regular use. To remove these 'low boilers', the system can be vented when it is safe to do so. Aside from this, there appears to be no signs of component wear or contamination within the sample. Please resubmit for testing in 12 months.

Comments: COC Flash Point is severely low. Visc @ 40°C is abnormally low. (GCD) % < 335°C is marginally high.

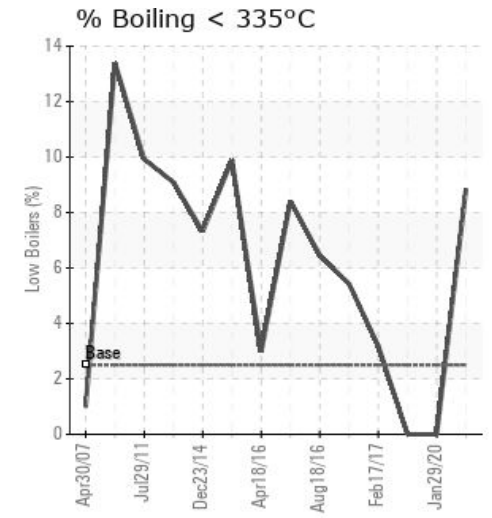
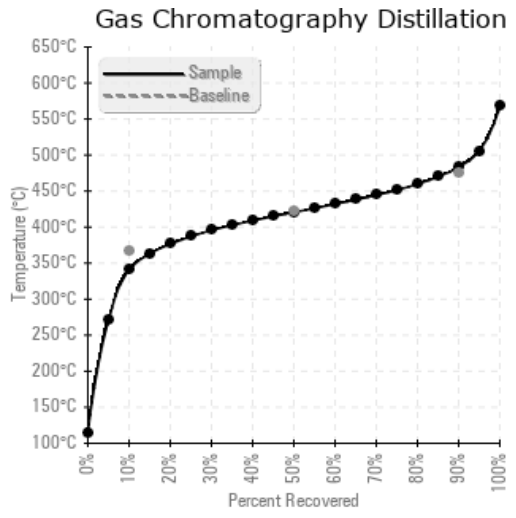
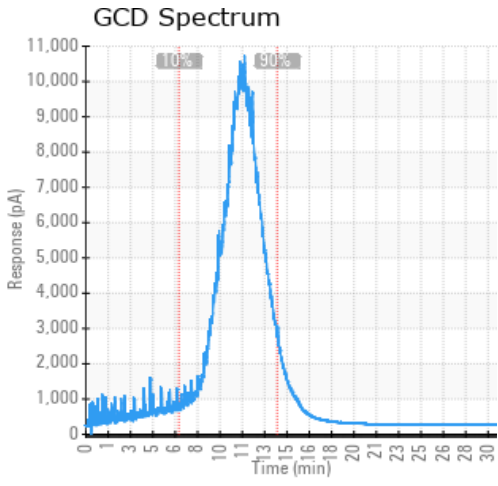
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
12/19/23	01/02/24	0.0m		291 / 144	24	22.1	0.08	0.045	645 / 341	789 / 421	902 / 483	8.85
01/29/20	02/05/20	60.0m	SOUTH MIAN HOT PUMP	385 / 196	14.4	27.9	0.160	0.066	730 / 388	790 / 421	869 / 465	0.00
08/23/18	08/31/18	36.0m	INLINE FILTER	392 / 200	11.4	29.4	0.221	0.036	700 / 371	780 / 415	857 / 458	0.00
02/17/17	03/01/17	12.0m	LAMINATE	403 / 206	14.2	30.5	0.059	0.051	689 / 365	796 / 425	897 / 480	3.19
01/04/17	01/23/17	10.0m	HOT OIL ROOM	401 / 205	20.3	27.7	0.01	0.076	677 / 358	798 / 425	910 / 488	5.43
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
12/19/23	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	47	0
01/29/20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56	0
08/23/18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61	0
02/17/17	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	28	0
01/04/17	11	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	4	0	33	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	
01/29/20	Results appear normal and no action required at this time. No indication of asphalt leak. Re-sample at next scheduled interval.
08/23/18	The oil condition remains similar since the last sample. Try to sample consistently every year. (GCD) 90% Distillation Point is abnormally low.
02/17/17	Everything looks good, the oil color lightened significantly and results overall improved, as if an oil addition was performed. No action required at this time. Re-sample at next scheduled interval.
01/04/17	The oil appears to be in excellent condition based on the results. Strong flash point, minimum contamination from water and no asphalt detected through the results, strong oxidation resistance (Acid Number like new oil). Re-sample at next scheduled interval. (GCD) 90% Distillation Point is marginally high.

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