

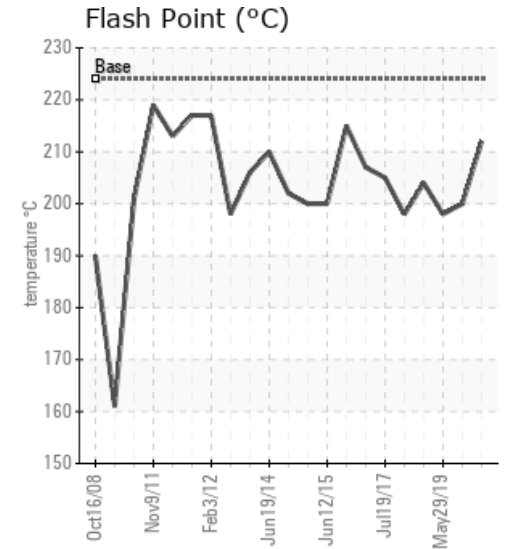
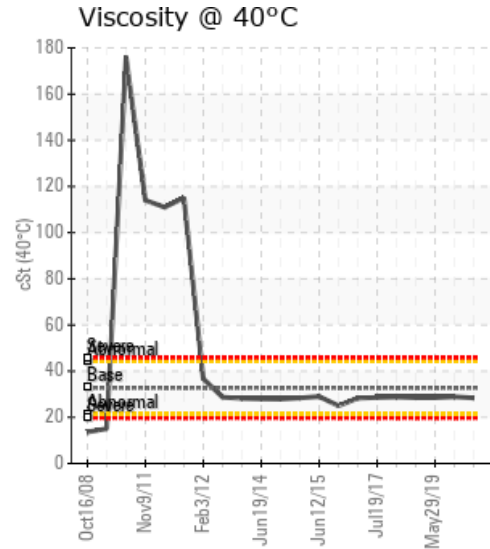
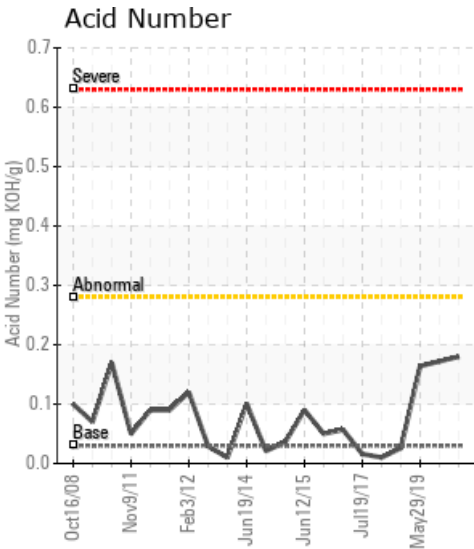
STILLYARD

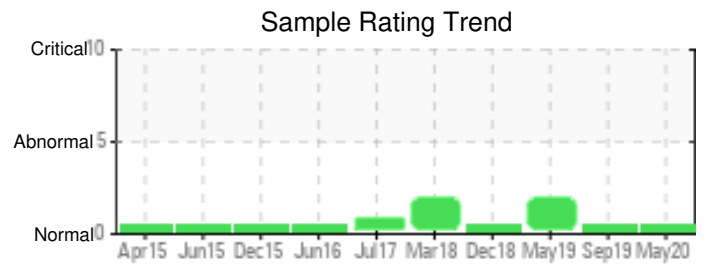
Customer: PTRHTF10068	System Information	Sample Information
Certainteed - Saint Gobain 1077 PLEASANT ST NORWOOD, MA 02062 USA Attn: David Fletcher Tel: (781)551-0656 E-Mail: david.r.fletcher@saint-gobain.com	System Volume: 3000 gal Bulk Operating Temp: 550F / 288C Heating Source: Blanket: Fluid: PETRO CANADA CALFLO AF Make: C.E. COOPER	Lab No: 02353751 Analyst: Doug Vrooman Sample Date: 05/04/20 Received Date: 05/13/20 Completed: 05/18/20 Doug Vrooman douglas.vrooman@petrocanadalsp.com

Recommendation: The latest report looks similar to previous. The low boilers GCD 10% has risen to 363 vs previous @ 357, but has not had a negative effect on the Flash Point, which has increased by 12 degrees C. Viscosity and Acid numbers remain constant. Continue to monitor at the current intervals.

Comments:

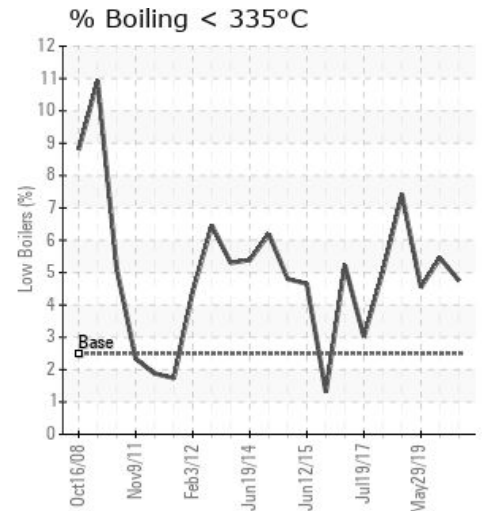
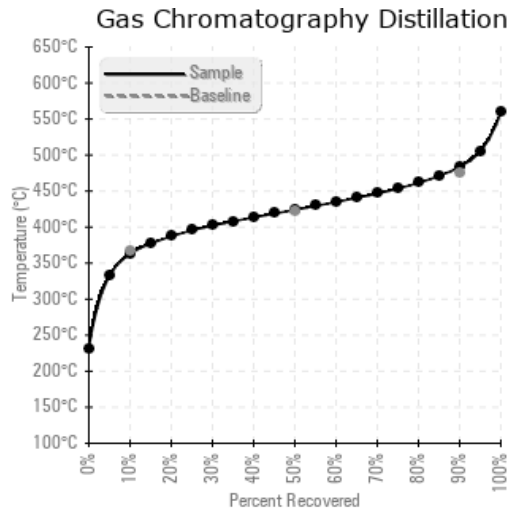
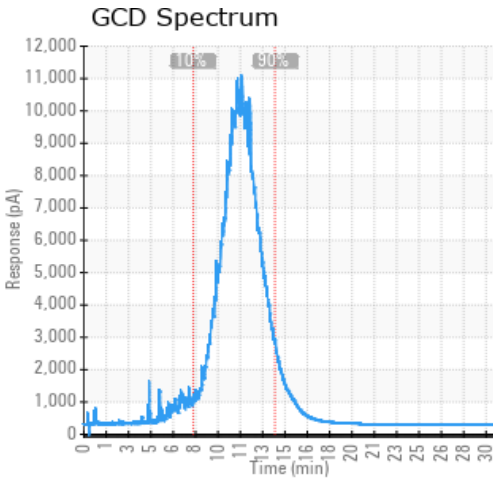
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
05/04/20	05/13/20	8y	SUCTION	414 / 212	13.9	28.4	0.18	0.143	685 / 363	795 / 424	903 / 484	4.75
09/20/19	10/01/19	8y	SUCTION TO CIRC.PUMP	392 / 200	24.0	28.9	0.172	0.156	675 / 357	786 / 419	888 / 476	5.45
05/29/19	06/19/19	7y	SUCTION CIRC PUMP	388 / 198	13.0	28.5	0.164	0.276	679 / 360	789 / 420	900 / 482	4.55
12/14/18	01/10/19	6y		399 / 204	4.5	28.5	0.026	0.027	651 / 344	767 / 408	877 / 470	7.42
03/20/18	04/04/18	6y		388 / 198	3.1	28.8	0.01	0.031	674 / 357	785 / 419	896 / 480	5.04
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
05/04/20	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	23	0
09/20/19	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	25	0
05/29/19	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	26	0
12/14/18	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	22	0
03/20/18	0	0	0	0	0	0	0	0	0	1	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

09/20/19	System fluid reports Normal. Test and monitor as usual.
05/29/19	Everything looks good and holding steady. flash point is strong, no visible signs of increased contamination by asphalt, moisture or other elements. Please re-sample at next scheduled interval.
12/14/18	Everything looks good and holding steady. flash point is strong, no visible signs of increased contamination by asphalt, moisture or other elements. Please re-sample at next scheduled interval.
03/20/18	Everything looks good and holding steady. flash point is strong, no visible signs of increased contamination by asphalt, moisture or other elements. Please re-sample at next scheduled interval.

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