

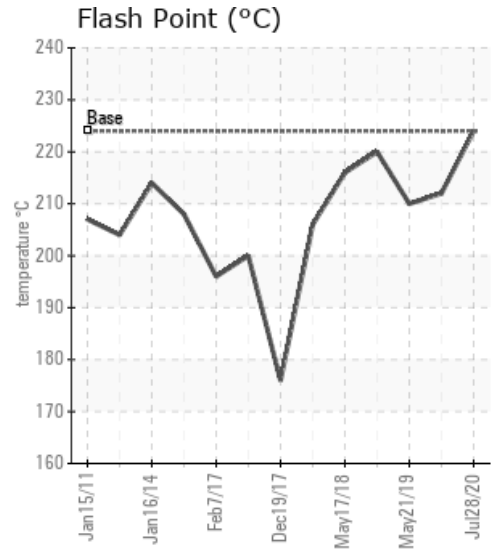
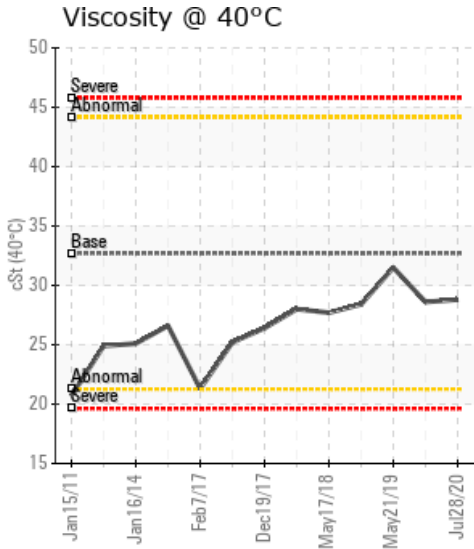
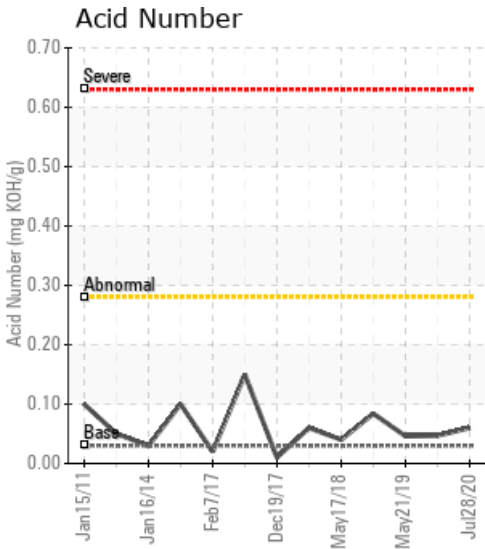
MODIFIED ROOM

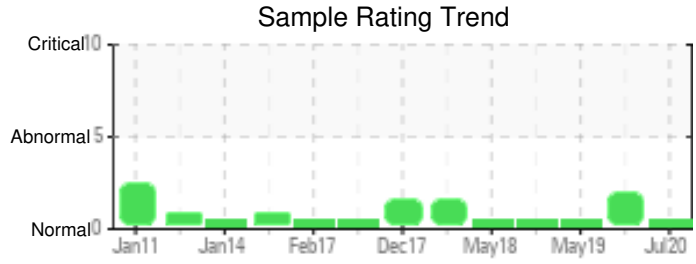
Customer: PTRHTF10059	System Information	Sample Information
CERTAINTEED - SAINT GOBAIN 11519 US RT 250 N MILAN, OH 44846 USA Attn: DAVE BLAKELY Tel: (419)541-0843 E-Mail: dave.l.blakely@saint-gobain.com	System Volume: 320 gal Bulk Operating Temp: 480F / 249C Heating Source: Blanket: Fluid: PETRO CANADA CALFLO AF Make: FIRST THERMOL	Lab No: 02368433 Analyst: Yvette Trzcinski Sample Date: 07/28/20 Received Date: 08/05/20 Completed: 08/14/20 Yvette Trzcinski yvette.trzcinski@petrocanadalsp.com

Recommendation: Viscosity has remained constant from the last sample in January and the low boilers amount has decreased - flash point looks good, Resample at the next sampling interval

Comments:

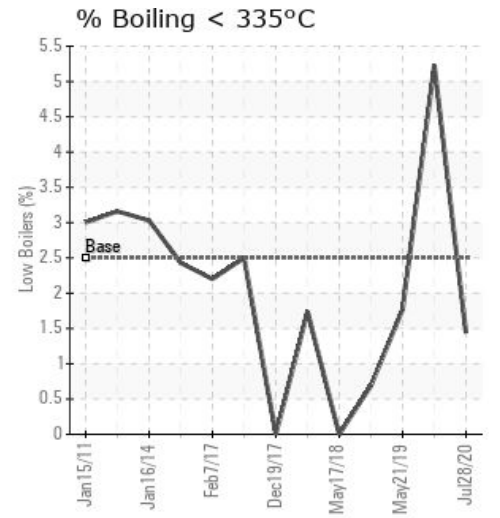
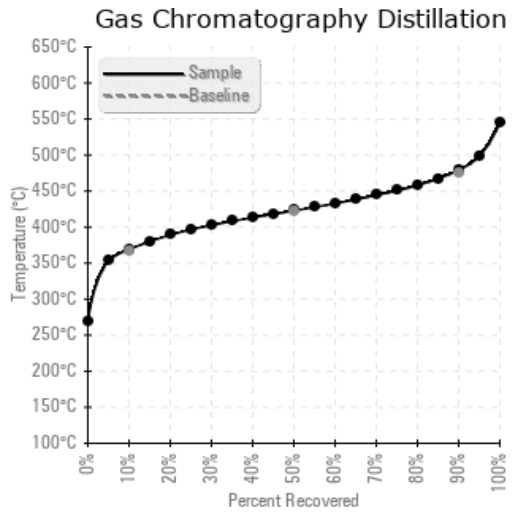
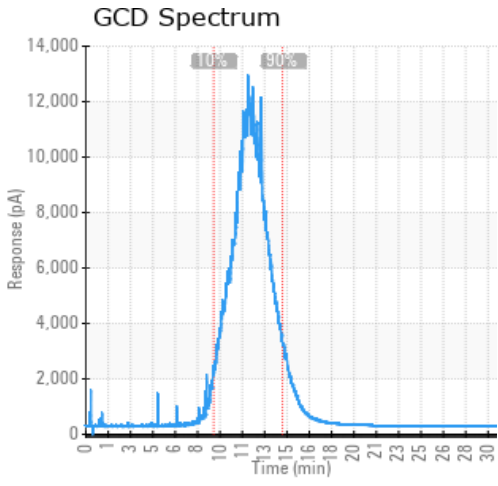
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
07/28/20	08/05/20	0h	FILTER DRAIN	435 / 224	20.9	28.8	0.06	0.030	696 / 369	793 / 423	895 / 479	1.44
01/09/20	01/17/20	3h		414 / 212	4.4	28.6	0.047	0.057	666 / 352	776 / 413	882 / 472	5.23
05/21/19	05/31/19	0h		410 / 210	9.2	31.5	0.046	0.008	687 / 364	790 / 421	898 / 481	1.77
10/11/18	10/24/18	0h		428 / 220	16.4	28.4	0.084	0.066	689 / 365	785 / 418	876 / 469	0.69
05/17/18	05/24/18	0h	LINE1 COATER RETURN	421 / 216	7.4	27.7	0.04	0.044	676 / 358	757 / 403	873 / 467	0.00
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
07/28/20	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	25	0
01/09/20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0
05/21/19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	0
10/11/18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	0
05/17/18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	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

01/09/20	The oil condition overall is good, it still has that light and clear appearance. The viscosity has dropped a bit and low boilers gone up a bit too even though the flash point remains strong. Resample at the next scheduled interval and if the low boilers and viscosity keep on trending this way we will recommend to do a vent off and replace volume losses with fresh oil.
05/21/19	Everything looks good, the fluid condition is great and degradation and contamination are not detected.
10/11/18	The condition looks good overall and we see no action needed at this time besides resampling in 6 months.
05/17/18	The last recommendation was to vent some of the low boilers out of the system. We're not sure if this was done but the flash point increased slightly. The condition looks good and we see no action needed at this time besides re-sampling in 6 months.

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