

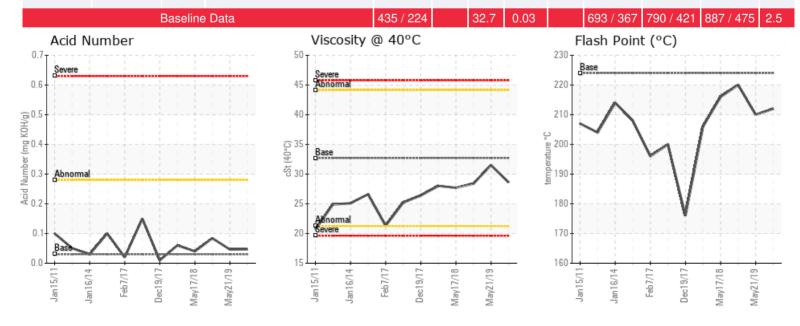
MODIFIED ROOM

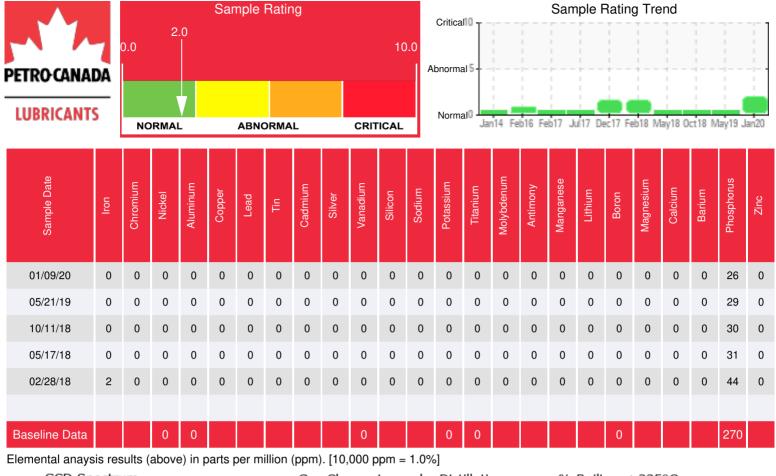
Customer: PTRHTF10059	System Information	Sample Information
CERTAINTEED - SAINT GOBAIN	System Volume: 320 gal	Lab No: 02332558
11519 US RT 250 N	Bulk Operating Temp: 480F / 249C	Analyst: Gaston Arseneault
MILAN, OH 44846 USA	Heating Source:	Sample Date: 01/09/20
Attn: DAVE BLAKELY	Blanket:	Received Date: 01/17/20
Tel: (419)541-0843	Fluid: PETRO CANADA CALFLO AF	Completed: 01/24/20
E-Mail: dave.l.blakely@saint-gobain.com	Make: FIRST THERMOL	

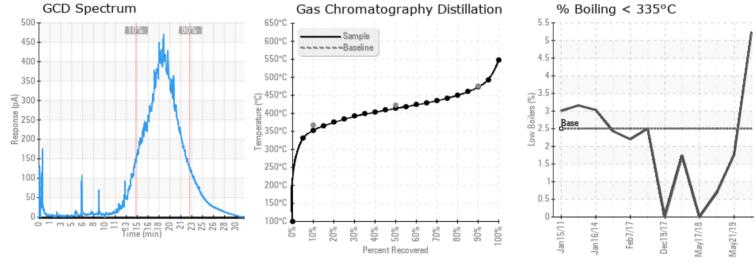
Recommendation: The oil condition overall is good, it still has that light and clear appearance. The viscosity has dropped a bit and low boilers gone up a bit too even though the flash point remains strong. Resample at the next scheduled interval and if the low boilers and viscosity keep on trending this way we will recommend to do a vent off and replace volume losses with fresh oil.

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	%
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
02/28/18	03/13/18	0h		403 / 206	8.0	28.0	0.06	0.107	688 / 364	792 / 422	895 / 480	1.74







	Historical Comments
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.
02/28/18	The viscosity improved a bit and judging by the increase in phosphorous we can conclude it's because some oil was added. The flash point improved too. Keep monitoring this fluid as we do not see any action items at this point

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.