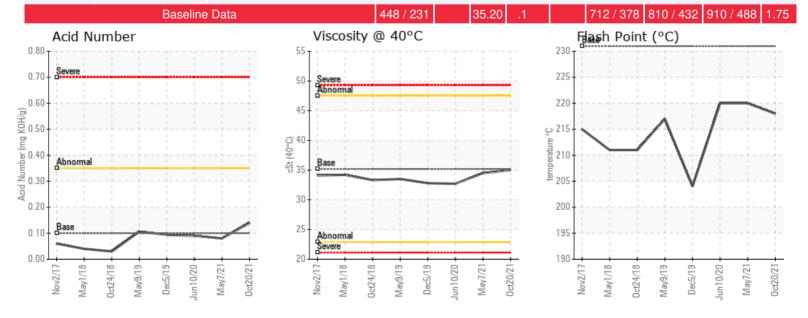


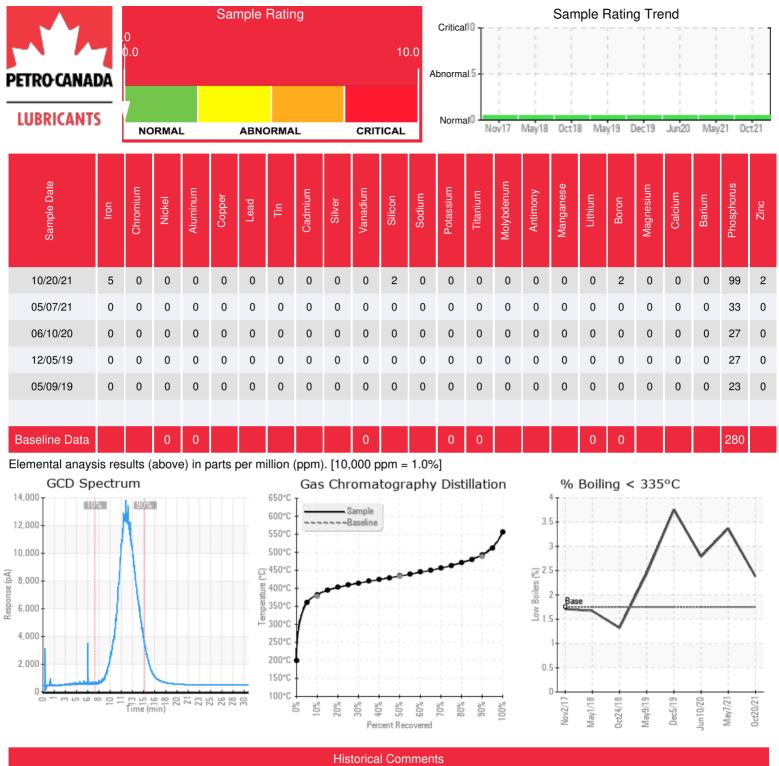
Customer: PTRHTF10141	System Information	Sample Information
TAMKO BUILDING PRODUCTS	System Volume: 110 gal	Lab No: 02453406
2300 35TH ST	Bulk Operating Temp: 350F / 177C	Analyst: Jake Finn
TUSCALOOSA, AL 35401 USA	Heating Source:	Sample Date: 10/20/21
Attn: Eric Foote	Blanket:	Received Date: 11/02/21
Tel: x:	Fluid: PETRO CANADA CALFLO HTF	Completed: 11/10/21
E-Mail: eric_foote@tamko.com	Make: Heat Exchanger And T	Jake Finn
		jake.finn@hollyfrontier.com

Recommendation: Sample indicates the system fluid is in great condition, shows no sign of degradation or contamination at this time, and is suitable for continued use.

Comments: N/A

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	%
10/20/21	11/02/21	0.0y		424 / 218	17.4	35.0	0.14	0.046	720 / 382	813 / 434	918 / 492	2.38
05/07/21	05/19/21	0.0y		428 / 220	24.0	34.5	0.08	0.043	699 / 371	800 / 427	894 / 479	3.37
06/10/20	06/29/20	0.0y		428 / 220	6.7	32.7	0.09	0.162	708 / 375	810 / 432	906 / 486	2.79
12/05/19	12/13/19	0.0y	PORT	399 / 204	35.7	32.8	0.094	0.052	691 / 366	804 / 429	914 / 490	3.76
05/09/19	05/17/19	2.0y	PORT	423 / 217	32.4	33.5	0.106	0.026	705 / 374	809 / 432	917 / 491	2.44





05/07/21	Analysis indicates the current fluid is in great condition and is suitable for continued use. Please resample and submit for testing in one year.N/A
06/10/20	Fluid is suitable for continued use. Please resubmit for testing in one year. Very light white metal and debris noted by lab. Consider checking system filters and changing them if necessary.
12/05/19	Oil is suitable for continued use. Remember to please include the time on oil when submitting oil samples for evaluation. Oil can be sent in for testing in one year.N/A
05/09/19	Oil is suitable for continued use. Please re-submit sample in 1 year. Acid number is normal, but has risen since the last sample, monitor at next test interval. Very light debris is noted by the lab.

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.