

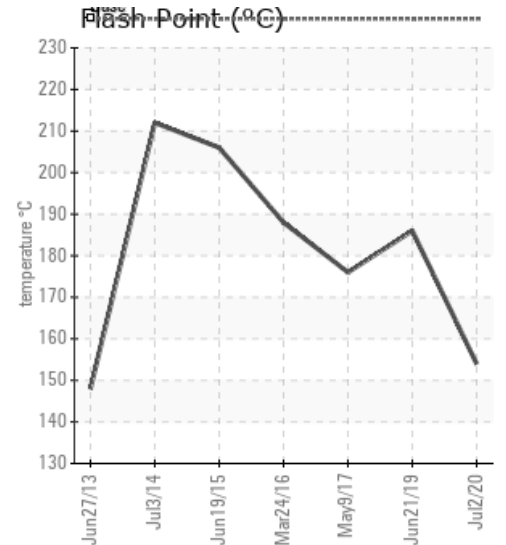
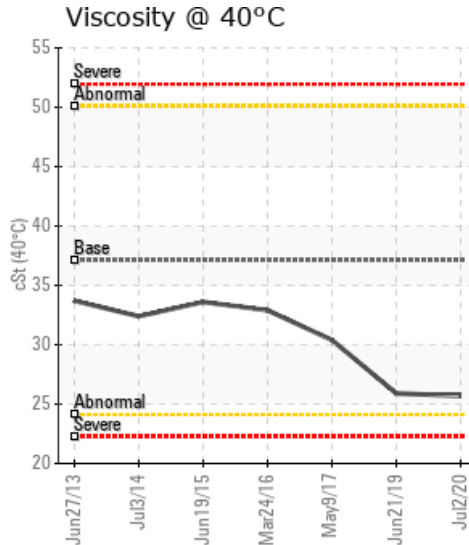
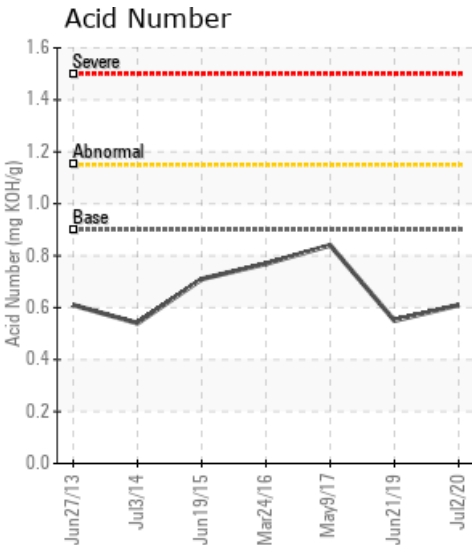
TPC 1500

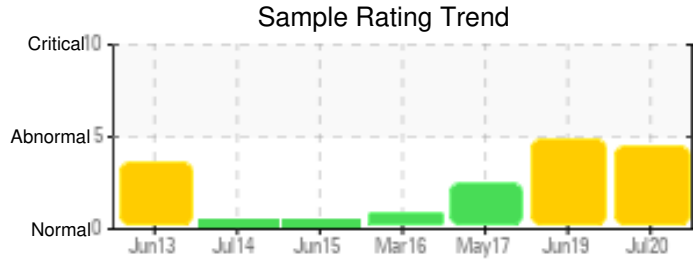
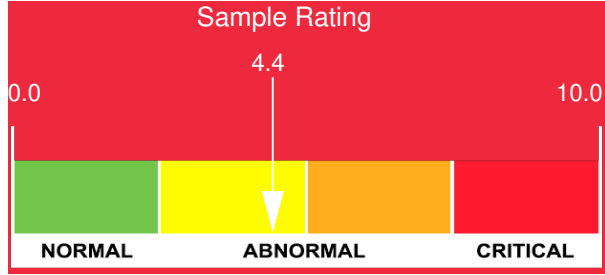
Customer: PTRHTF40049	System Information	Sample Information
PLUSFOOD BV HOUTWAL 30 OOSTERWOLDE 8431EX OOSTERWOLDE, 8431EX Netherlands Attn: WILBERT SNIJERS Tel: E-Mail: w.snijers@klt.nl	System Volume: 0 gal Bulk Operating Temp: Not Specified Heating Source: Blanket: Fluid: PETRO CANADA PURITY FG HEAT TRANSFER FLUID Make:	Lab No: 02364175 Analyst: Matthias Voss Sample Date: 07/02/20 Received Date: 07/13/20 Completed: 07/16/20 Matthias Voss Matthias.Voss@petrocanadalsp.com

Recommendation: Low flash pt and distillation 10% temperature. Try and vent if possible to do so safely and recover the distillation 10% and other low end values. Other parameters within limits. Re-sample at normal frequency if actions can be taken to recover

Comments: COC Flash Point is severely low, but is not correlating with (GCD) % < 335°C trend. (GCD) 10% Distillation Point is abnormally low. (GCD) % < 335°C is marginally high.

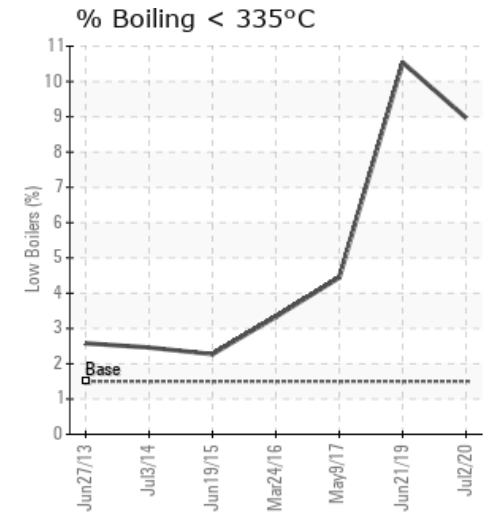
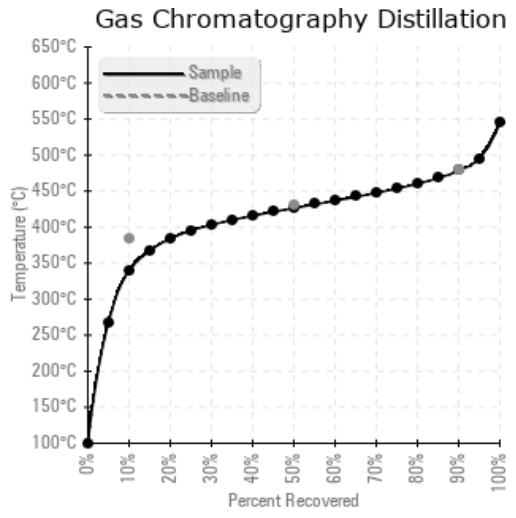
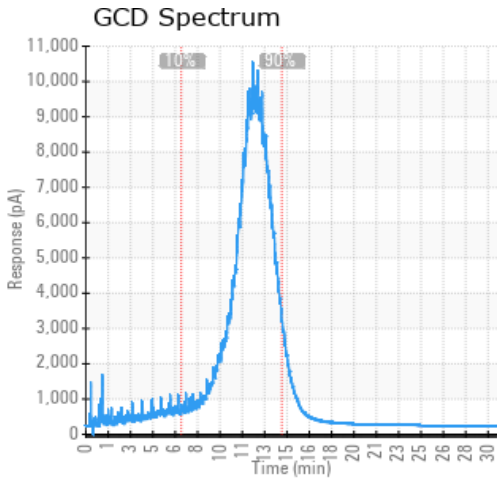
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
07/02/20	07/13/20	9y		309 / 154	22.6	25.7	0.61	0.081	643 / 340	800 / 426	893 / 478	8.97
06/21/19	07/02/19	8y		367 / 186	22.0	25.9	0.550	0.071	622 / 328	783 / 417	884 / 473	10.54
05/09/17	05/12/17	6y		349 / 176	24.3	30.4	0.840	0.060	688 / 364	805 / 430	924 / 495	4.44
03/24/16	04/01/16	5y	PTRHTF40049	370 / 188	10.1	32.9	0.769	0.061	697 / 370	807 / 431	891 / 477	3.33
06/19/15	06/25/15	4y		403 / 206	26.8	33.6	0.71	0.023	708 / 376	812 / 433	905 / 485	2.27
Baseline Data				459 / 237		37.12	0.90		721 / 383	807 / 431	892 / 478	1.5





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
07/02/20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
06/21/19	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0
05/09/17	18	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	16	0
03/24/16	18	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	19	2
06/19/15	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	2
Baseline Data			0	0						0			0	0				0	0				230	

Elemental analysis results (above) in parts per million (ppm). [10,000 ppm = 1.0%]



Historical Comments	
06/21/19	Downward trend in viscosity and lowering of flash pt and distillation 10% temperature. Try and vent if possible to do so safely and recover the distillation 10% and other low end values. Other parameters within limits. Re-sample at normal frequency if actions can be taken to recover (GCD) 10% Distillation Point is severely low. COC Flash Point is abnormally low. (GCD) % < 335°C is marginally high.
05/09/17	Oil appears to be fit for further service, suggest sample at next scheduled maintenance interval. COC Flash Point is severely low. (GCD) 90% Distillation Point is abnormally high.
03/24/16	Oil appears to be in good condition and fit for further service. Recommend sample at next scheduled maintenance interval. COC Flash Point is abnormally low.
06/19/15	Oil appears to be in good condition and fit for further service. Sample at next scheduled maintenance interval.

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