

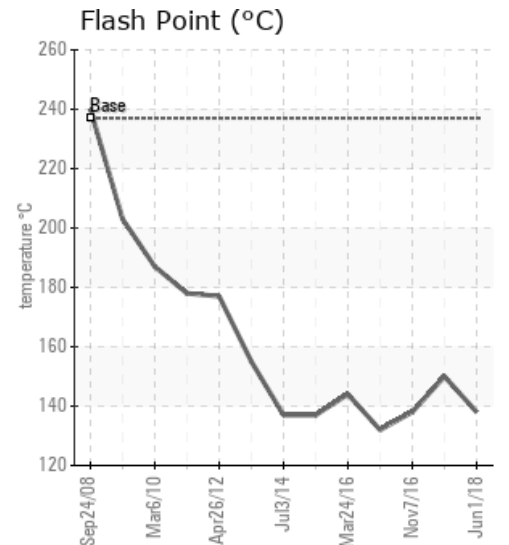
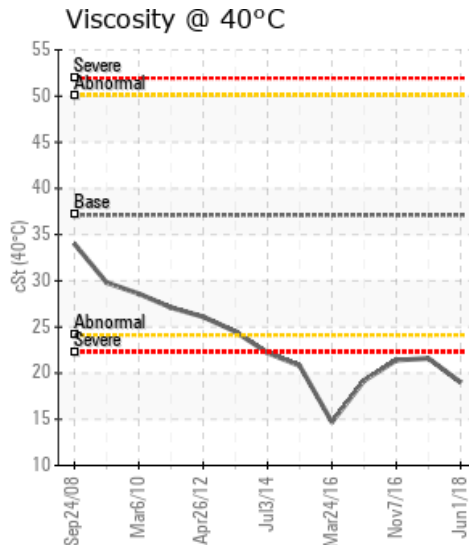
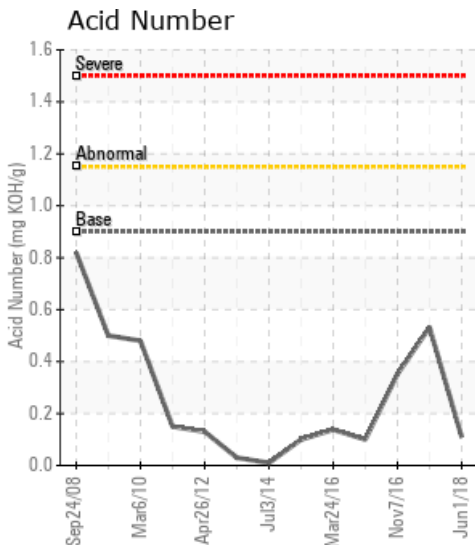
## WANSON TPC 1250 LN HP

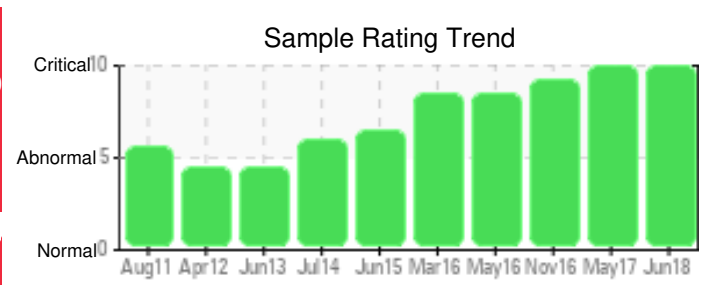
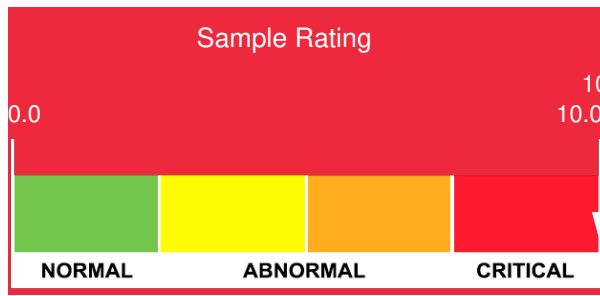
Customer: PTRHTF40049	System Information	Sample Information
PLUSFOOD BV HOUTWAL 30 OOSTERWOLDE 8431EX OOSTERWOLDE, 8431EX Netherlands Attn: WILBERT SNIJERS Tel: E-Mail: w.snijers@klt.nl	System Volume: 5000 ltr Bulk Operating Temp: 212F / 100C Heating Source: Blanket: Fluid: PETRO CANADA PURITY FG HEAT TRANSFER FLUID Make: WANSON	Lab No: 02221301 Analyst: Philip Riley Sample Date: 06/01/18 Received Date: 06/08/18 Completed: 06/12/18 To discuss this report contact Philip Riley at (440)124-4378171

Recommendation: Out of spec in numerous parameters including viscosity, insoluble etc. Most seriously the COC Flash Point is severely low and recommend an immediate change, flush of the system to rid the circuit of any carryover product and refill with fresh oil

Comments: Pentane Insolubles levels are abnormally high. (GCD) % < 335°C is severely high. (GCD) 10% Distillation Point is severely low. (GCD) 50% Distillation Point is severely low. (GCD) 90% Distillation Point is severely low. COC Flash Point is severely low. Visc @ 40°C is severely low.

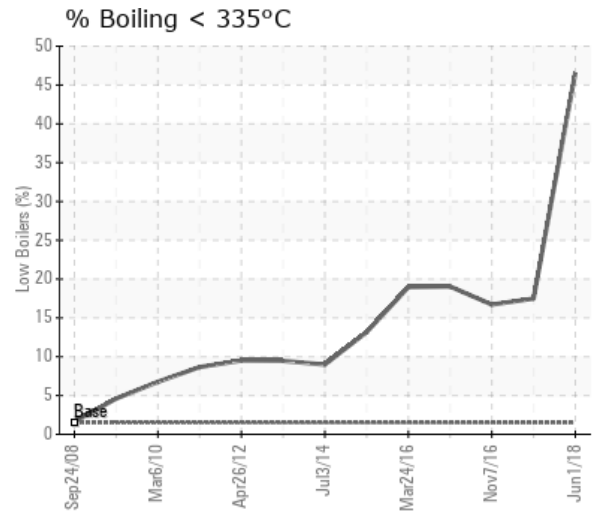
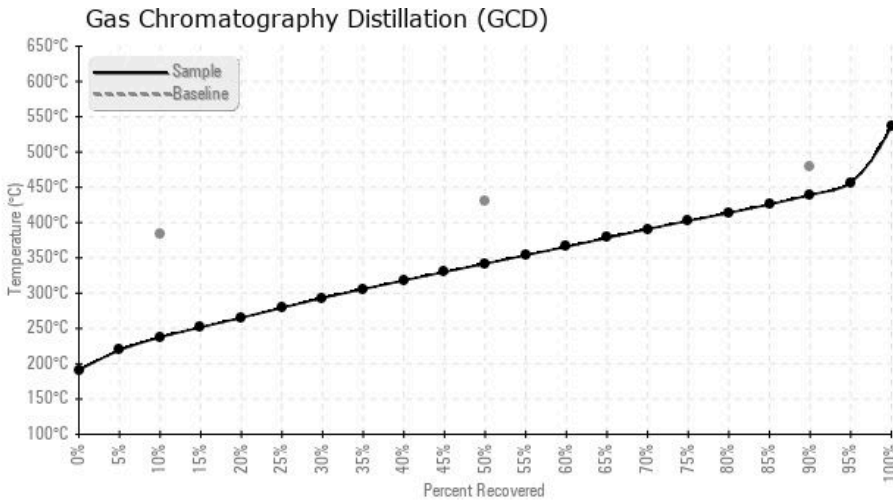
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC) °F/°C	Water (KF) ppm	Viscosity (40°C) cSt	Acid Number mg/KOH/g	Solids %wt	GCD 10% °F/°C	GCD 50% °F/°C	GCD 90% °F/°C	GCD % < 335°C %
06/01/18	06/08/18	10y		280 / 138	19.0	19.0	0.11	0.428	459 / 237	647 / 342	823 / 439	46.56
05/09/17	05/12/17	9y		302 / 150	88.4	21.6	0.532	0.441	563 / 295	776 / 413	955 / 513	17.49
11/07/16	11/21/16	9y		280 / 138	19.4	21.4	0.352	0.198	563 / 295	783 / 417	916 / 491	16.71
05/07/16	07/11/16	8y		270 / 132	23.3	19.2	0.10	0.163	547 / 286	770 / 410	903 / 484	19.05
03/24/16	04/01/16	8y	PTRHTF40049	291 / 144	42.9	14.7	0.138	0.114	541 / 283	774 / 412	892 / 478	18.95
06/19/15	06/25/15	7y		279 / 137	10.1	20.8	0.10	0.072	598 / 315	788 / 420	891 / 477	13.16
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
06/01/18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	0
05/09/17	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	60	0
11/07/16	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	57	0
05/07/16	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	48	0
03/24/16	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	53	0
06/19/15	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	48	0
<b>Baseline Data</b>			0	0						0		0	0					0					230	

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



Historical Comments	
05/09/17	Oil is not in good condition suggest changing the oil at the next available interval. Pentane Insolubles levels are abnormally high. (GCD) 90% Distillation Point is severely high. (GCD) 10% Distillation Point is severely low. COC Flash Point is severely low. Visc @ 40°C is severely low.
11/07/16	Recommend an oil change. (GCD) % < 335°C is severely high. (GCD) 10% Distillation Point is severely low. COC Flash Point is severely low. Visc @ 40°C is severely low. (GCD) 90% Distillation Point is marginally high.
05/07/16	Oil contains low boilers. Consider Oil change. (GCD) % < 335°C is severely high. (GCD) 10% Distillation Point is severely low. COC Flash Point is severely low. Visc @ 40°C is severely low.
03/24/16	Analysis would suggest an oil change as soon as possible. (GCD) % < 335°C is severely high. (GCD) 10% Distillation Point is severely low. COC Flash Point is severely low. Visc @ 40°C is severely low.
06/19/15	Considerable low boilers detected could possible affect the efficiency of the HT System.Suggest consider changing fluid within the next 12 months based on the last 2 years results. (GCD) 10% Distillation Point is severely low. COC Flash Point is severely low. Visc @ 40°C is severely low. (GCD) % < 335°C is abnormally high. (GCD) 90% Distillation Point is marginally low.

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