

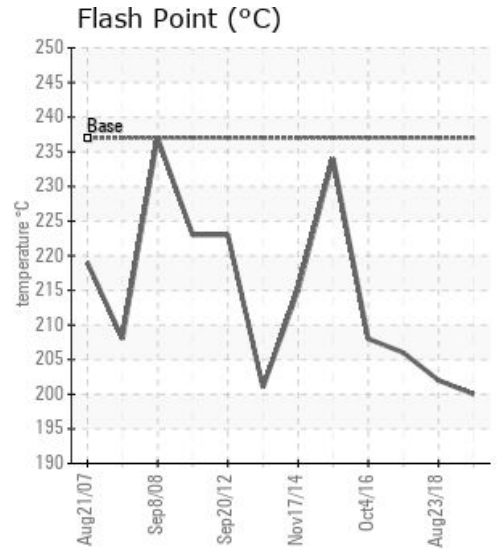
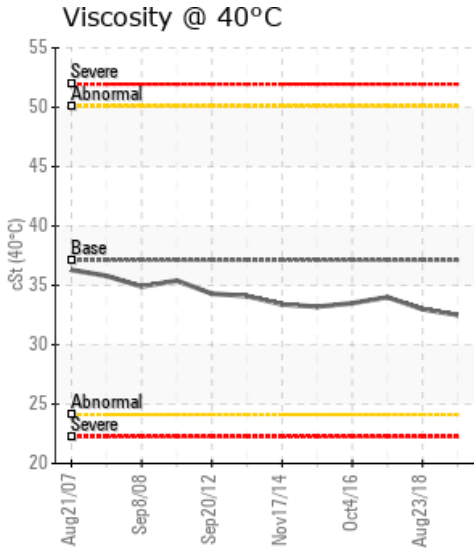
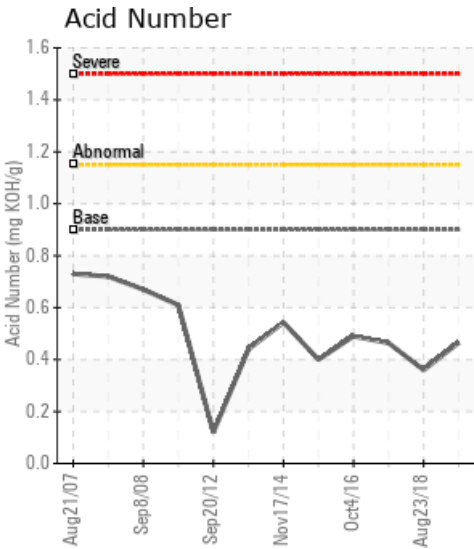
RELUTHERM

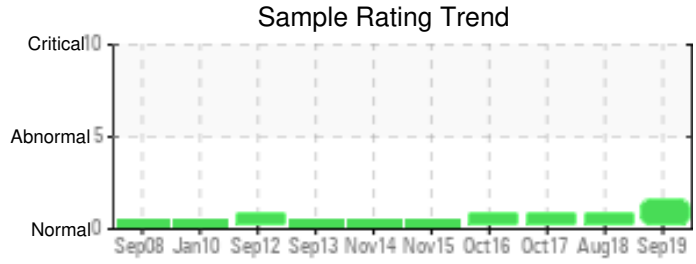
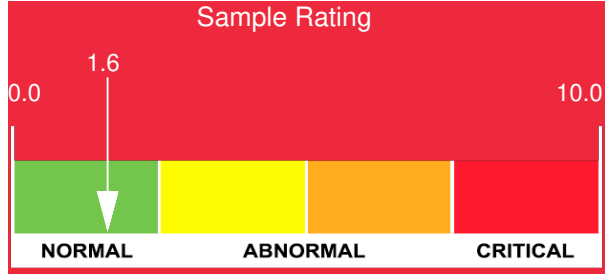
Customer: PTRHTF40056	System Information	Sample Information
SOFINE FOODS BV SPERWERWEG 7 LANDGRAAF 6374AG LANDGRAAF, 6374AG Netherlands Attn: WILBERT SNIJERS Tel: E-Mail: w.snijers@klt.nl	System Volume: 1400 ltr Bulk Operating Temp: 265F / 129C Heating Source: Blanket: Fluid: PETRO CANADA PURITY FG HEAT TRANSFER FLUID Make: RELUTHERM	Lab No: 02307723 Analyst: Philip Riley Sample Date: 09/05/19 Received Date: 09/11/19 Completed: 09/15/19

Recommendation: COC creeping downwards but no step change from last sample and little evidence on the GC of light molecules present. Re-sample at normal frequency

Comments: (GCD) 90% Distillation Point is marginally high. COC Flash Point is marginally low.

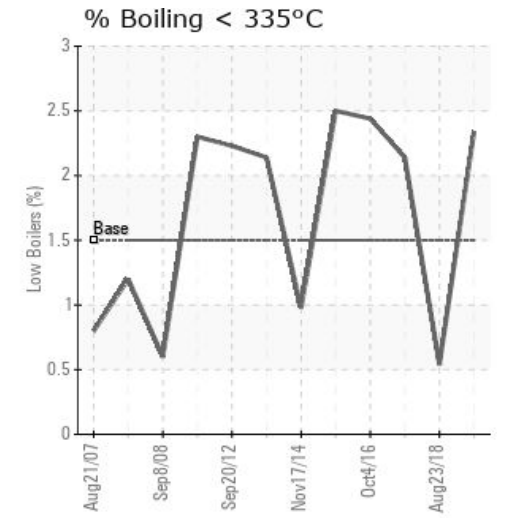
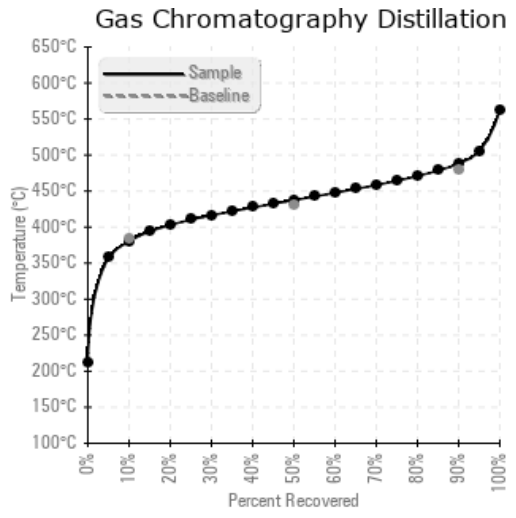
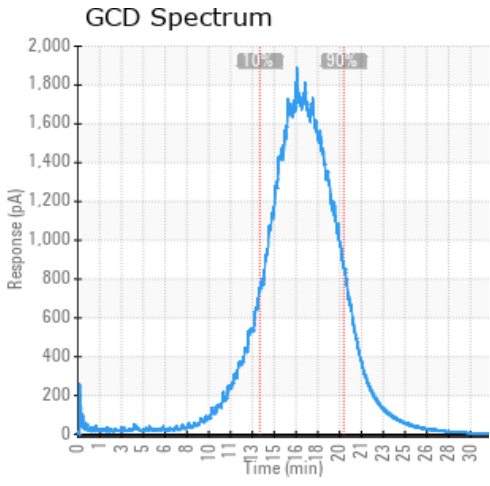
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
09/05/19	09/11/19	12y		392 / 200	20.5	32.5	0.465	0.081	717 / 380	819 / 437	911 / 488	2.34
08/23/18	08/28/18	11y		396 / 202	15.4	33.0	0.36	0.040	710 / 376	805 / 430	903 / 484	0.54
10/05/17	10/12/17	10y		403 / 206	6.0	34.0	0.464	0.082	715 / 379	814 / 434	903 / 484	2.14
10/04/16	10/11/16	9y		406 / 208	14.0	33.5	0.49	0.069	714 / 379	822 / 439	916 / 491	2.44
11/10/15	11/23/15	8y	PTRHTF40056	453 / 234	10.0	33.2	0.40	0.037	714 / 379	816 / 435	908 / 487	2.50
11/17/14	12/01/14	7y		419 / 215	6.4	33.4	0.543	0.050	723 / 384	822 / 439	917 / 492	0.98
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	
09/05/19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	
08/23/18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0
10/05/17	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0
10/04/16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0
11/10/15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	12	0
11/17/14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0
Baseline Data			0	0						0			0	0					0					230	

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



Historical Comments	
08/23/18	Marginally low COC Flash Point which has trended slightly downwards over previous annual samples. All other parameters within expected limits. Check required at normal period and be prepared to take action if the COC Flash Pt slips further COC Flash Point is marginally low.
10/05/17	COC slightly down and highlighted as caution. Small top up would elevate to spec. All other parameters look OK COC Flash Point is marginally low.
10/04/16	Oil appears to be fit for further service. Suggest sample at next scheduled maintenance interval.
11/10/15	Oil appears to be in good condition and fit for further service.Suggest sample at next scheduled maintenance interval.
11/17/14	Oil appears to be in good condition.Sample at next scheduled maintenance interval.

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