

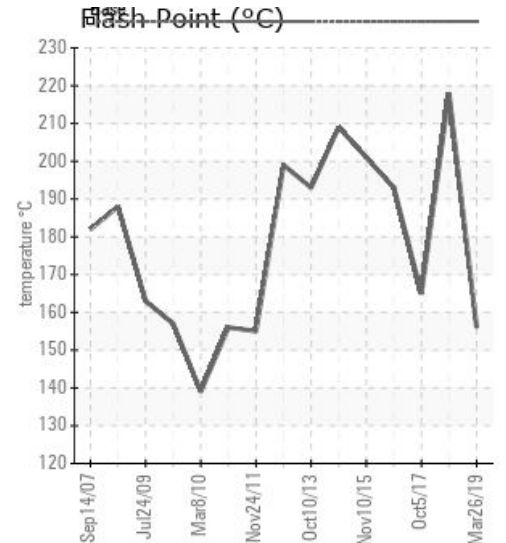
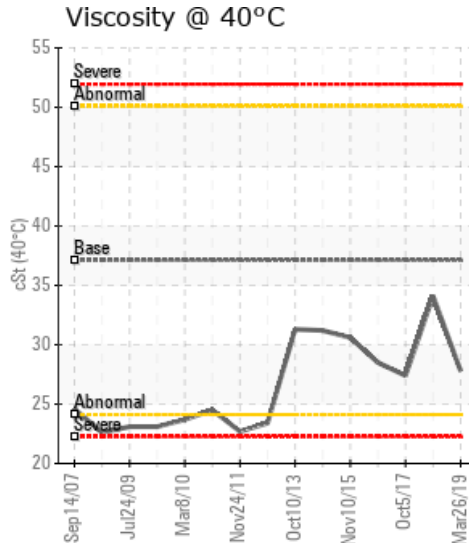
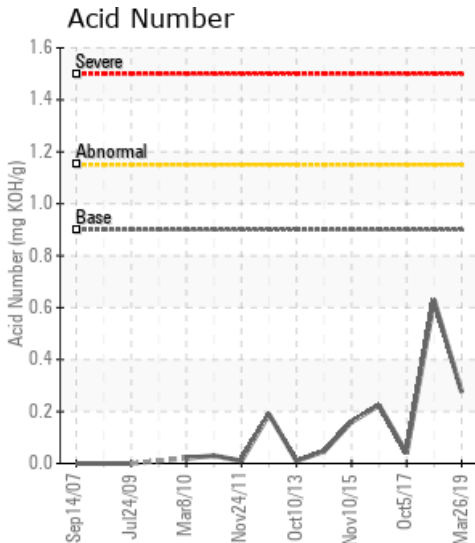
WANSON TPL 400B-300LNE

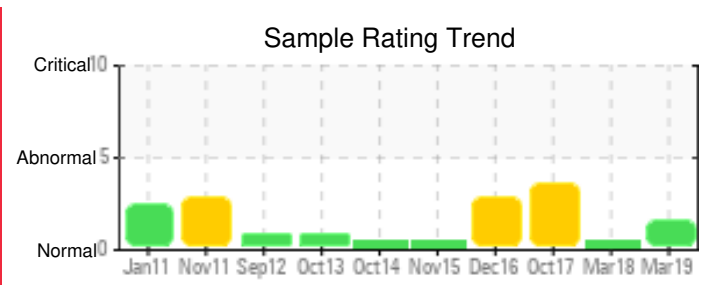
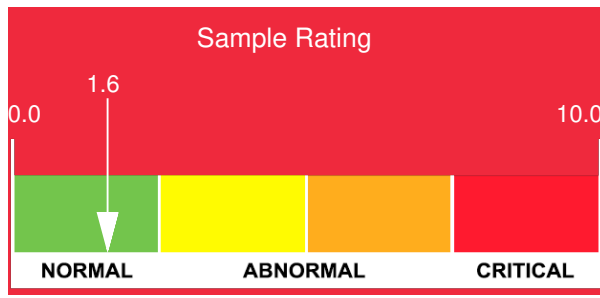
Customer: PTRHTF40027	System Information	Sample Information
BAKX FOODS DE RUN 4463 NORTH BRABANT VELDHOVEN, NOR 5503 LS NETHERLANDS Attn: Maintenance Manager Tel:	System Volume: 1800 ltr Bulk Operating Temp: 255F / 124C Heating Source: Blanket: Fluid: PETRO CANADA PURITY FG HEAT TRANSFER FLUID Make: WANSON	Lab No: 02276861 Analyst: Philip Riley Sample Date: 03/26/19 Received Date: 04/02/19 Completed: 04/16/19

Recommendation: Flash Point is very low and off specification. Recommend if safe to do so to vent the system and try and rid of light ends that may be influencing flash point. Evidence on trace of cracking of the oil. If flash point cannot be recovered then recommend a change and flush

Comments: COC Flash Point is severely low.

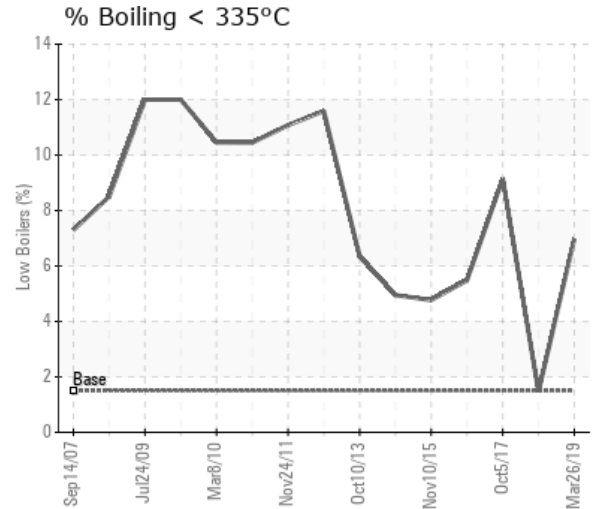
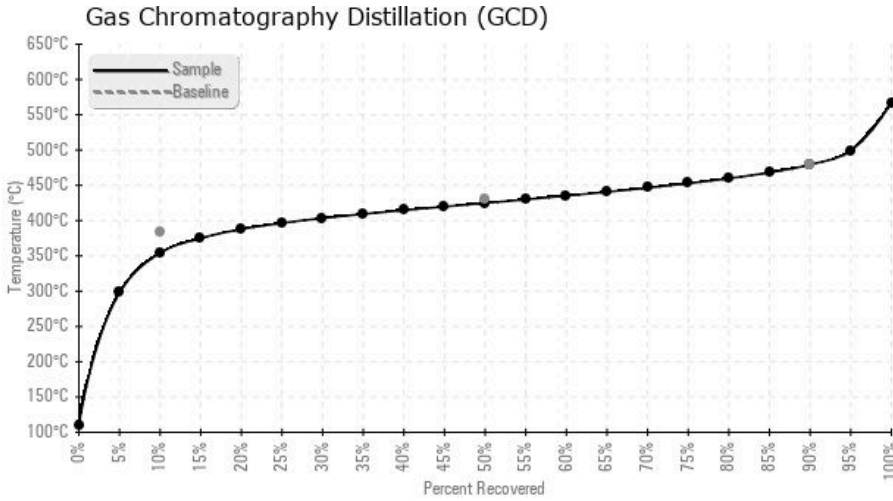
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
03/26/19	04/02/19	1y		313 / 156	0.00	27.8	0.275	0.100	670 / 354	797 / 425	895 / 479	6.97
03/08/18	03/15/18	1y		424 / 218	20.8	34.1	0.63	0.107	721 / 383	813 / 434	902 / 483	1.47
10/05/17	10/12/17	3y		329 / 165	11.2	27.4	0.040	0.282	641 / 338	791 / 422	905 / 485	9.14
12/09/16	12/16/16	3y		379 / 193	2.2	28.5	0.224	0.119	682 / 361	805 / 429	913 / 489	5.48
11/10/15	11/23/15	2y	PTRHTF40027	394 / 201	10.0	30.6	0.16	0.101	686 / 363	798 / 426	906 / 486	4.77
10/24/14	10/30/14	1y		408 / 209	12.4	31.2	0.047	0.139	691 / 366	803 / 429	917 / 492	4.95
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
03/26/19	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0
03/08/18	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	12	0
10/05/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/09/16	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0
10/24/14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	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	
03/08/18	All parameters well within expected limits and controls. Fluid fit for further use and normal sample period
10/05/17	Recommend fluid change and system check. Flash Point very low, backed up with light molecules evident in GC trace COC Flash Point is abnormally low. (GCD) 10% Distillation Point is abnormally low. (GCD) % < 335°C is marginally high.
12/09/16	Oil appears to be in good condition and fit for further service. Suggest sample at next scheduled maintenance interval. COC Flash Point is marginally low.
11/10/15	Oil appears to be in good condition and fit for further service. Suggest sample at next scheduled maintenance interval.
10/24/14	Oil is fit for further service. Sample at next scheduled maintenance interval.

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.