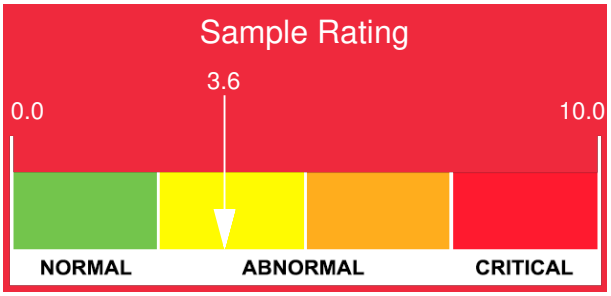
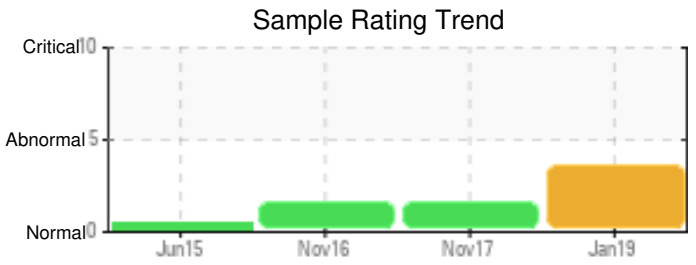




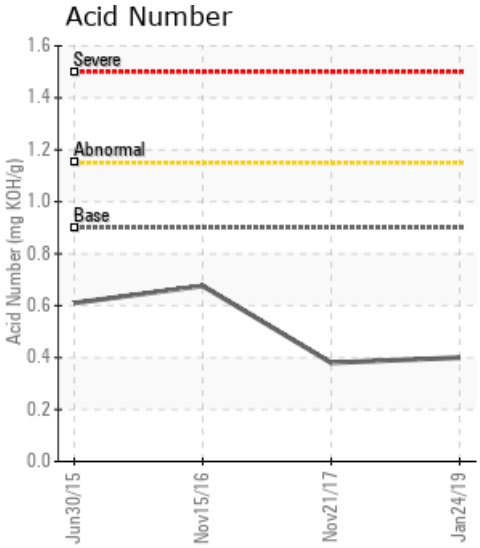
WANSON 600LNE

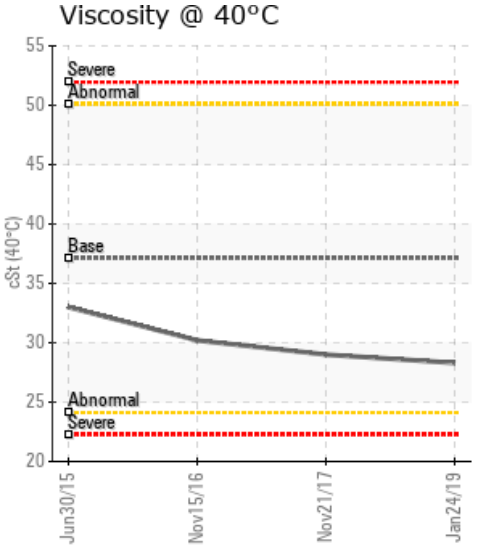
Customer: PTRHTF40017	System Information	Sample Information
INTERSNACK BV HAVENSTRAAT 62 GELDERLAND DOETINCHEM, GEL NETHERLANDS Attn: Maintenance Manager Tel: E-Mail:	System Volume: 2600 ltr Bulk Operating Temp: Not Specified Heating Source: Blanket: Fluid: PETRO CANADA PURITY FG HEAT TRANSFER FLUID Make: WANSON	Lab No: 02265954 Analyst: Philip Riley Sample Date: 01/24/19 Received Date: 02/04/19 Completed: 02/19/19

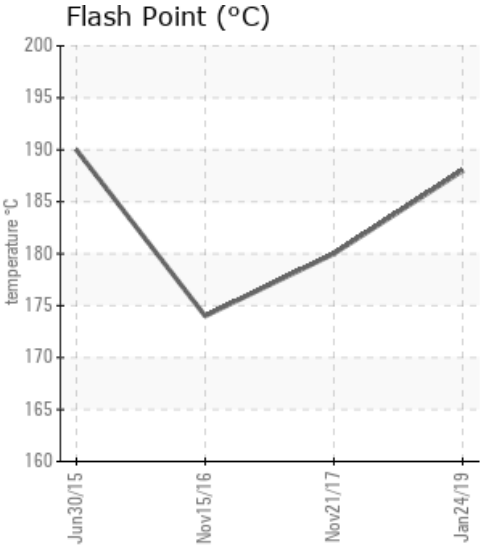
Recommendation: COC low but improved from previous samples, was some form of venting done. 10% Dist point also marginally low. If can be done safely attempt to do further venting and raise both values. Viscosity trending downwards but within limits. Sample condition worsening showing signs of aging. Fit for further use and sample again at normal frequency

Comments: COC Flash Point is abnormally low. (GCD) 10% Distillation Point is abnormally low. (GCD) % < 335°C is marginally high.

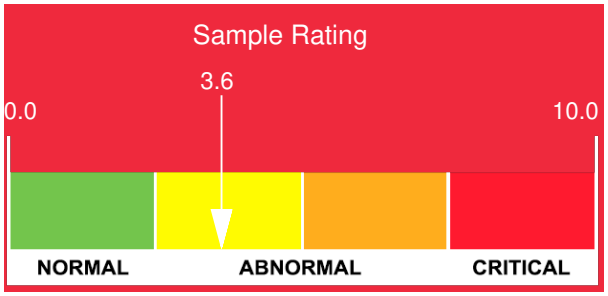
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
01/24/19	02/04/19	5y		370 / 188	35.1	28.3	0.400	0.050	644 / 340	776 / 414	885 / 474	8.61
11/21/17	11/27/17	4y		356 / 180	12.3	29.0	0.38	0.075	669 / 354	776 / 413	865 / 463	5.86
11/15/16	11/24/16	3y		345 / 174	34.9	30.2	0.676	0.061	692 / 367	806 / 430	908 / 487	4.38
06/30/15	07/03/15	2y		374 / 190	23.3	33.0	0.61	0.048	716 / 380	820 / 438	927 / 497	2.00
Baseline Data				459 / 237		37.12	0.90		721 / 383	807 / 431	892 / 478	1.5

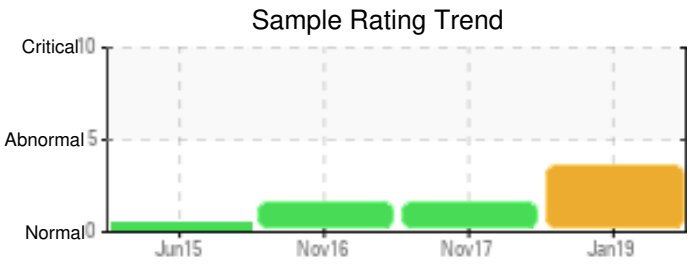






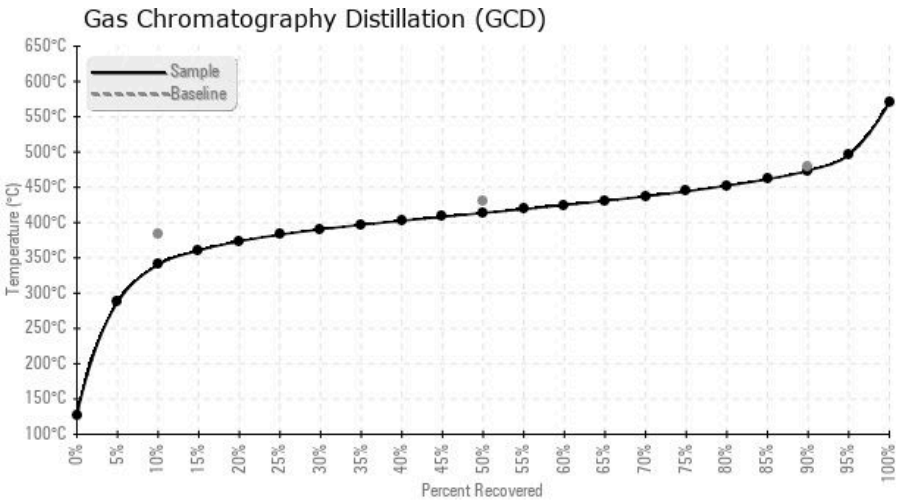
PETRO-CANADA LUBRICANTS

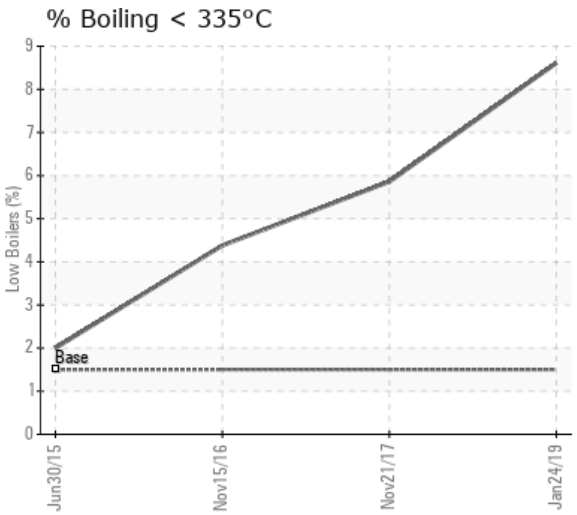




Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
01/24/19	17	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	1
11/21/17	12	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0
11/15/16	15	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0
06/30/15	50	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	1
Baseline Data			0	0						0			0	0					0				230	

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





Historical Comments

11/21/17	Light molecules increased substantially over the 3 samples, may be worth de-gassing if possible to remove. Flash point consistently low but marginally improved on previous sample, but lower than expected. Syuspect the fluid may have been partially changed (?) to increase the flash point. Suggest to monitor closely and if the flash point cannot be recovered look to change at next convenient point COC Flash Point is abnormally low. (GCD) 90% Distillation Point is abnormally low.
11/15/16	Oil is fit for service. Suggest sample at next scheduled maintenance interval. COC Flash Point is severely low.
06/30/15	Oil appears for for further service, sample at next scheduled maintenance interval.

