

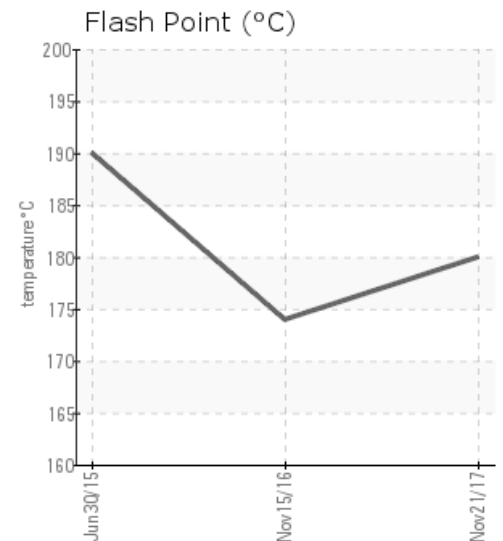
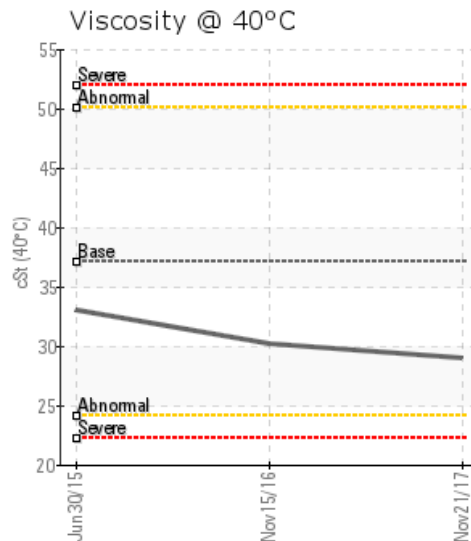
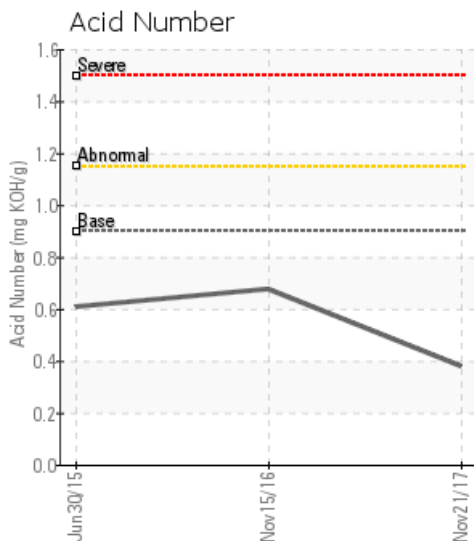
WANSON 600LNE

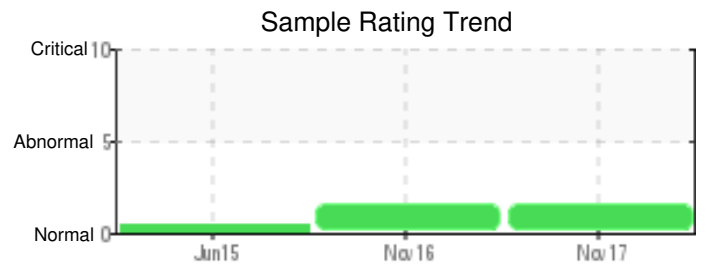
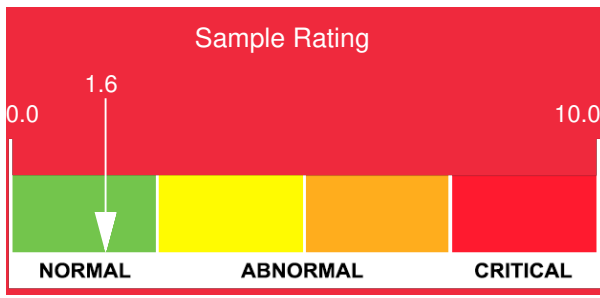
Customer: PTRHTF40017	System Information	Sample Information
INTERSNACK BV HAVENSTRAAT 62 GELDERLAND DOETINCHEM, GEL NETHERLANDS Attn: Maintenance Manager Tel: E-Mail:	System Volume: 2600 ltr Bulk Operating Temp: Not Specified Heating Source: Blanket: Fluid: PETRO CANADA PURITY FG HEAT TRANSFER FLUID Make: WANSON	Lab No: 02184193 Analyst: Philip Riley Sample Date: 11/21/17 Received Date: 11/27/17 Completed: 11/29/17 To discuss this report contact Philip Riley at (440)124-4378171

Recommendation: 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. Suspect 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

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

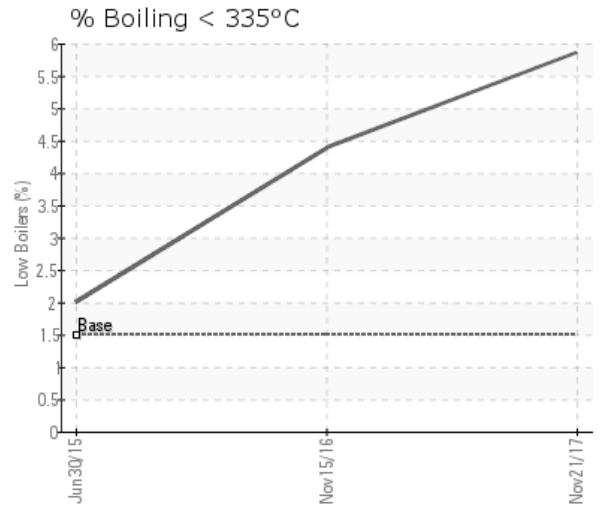
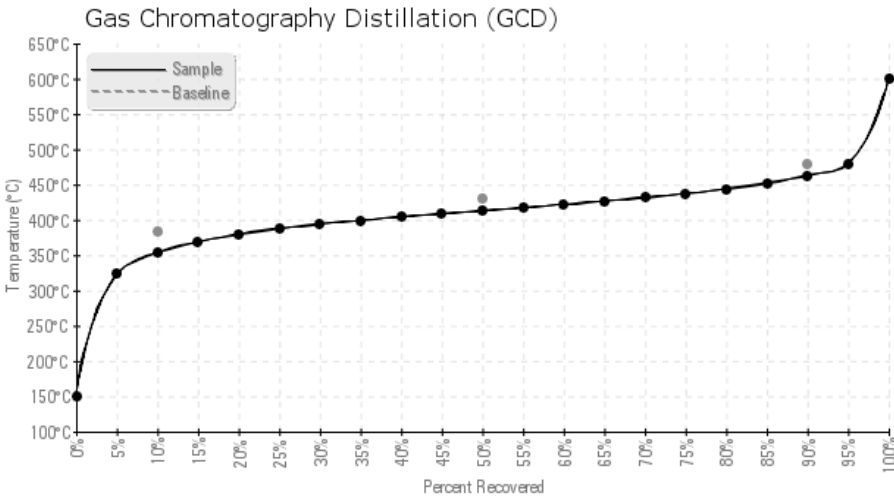
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
11/21/17	11/27/17	4y		356 / 180	12.3	29.0	0.38	0.075	669 / 354	776 / 413	865 / 463	5.86
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





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
11/21/17	12	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	1
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	1	0	0	0	0	0	0	0	0	0	0	0	1	0	12	1	
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

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.

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