

# WANSON TPC 450 LN

**Customer: PTRHTF40044**  
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 Urk, Netherlands  
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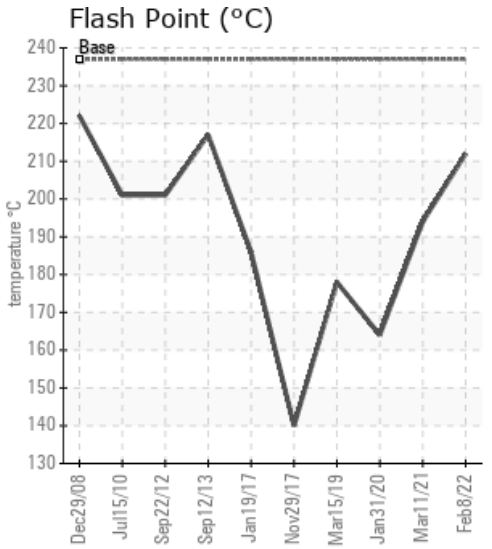
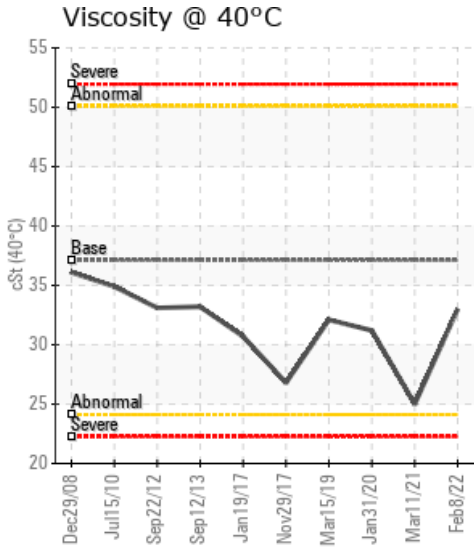
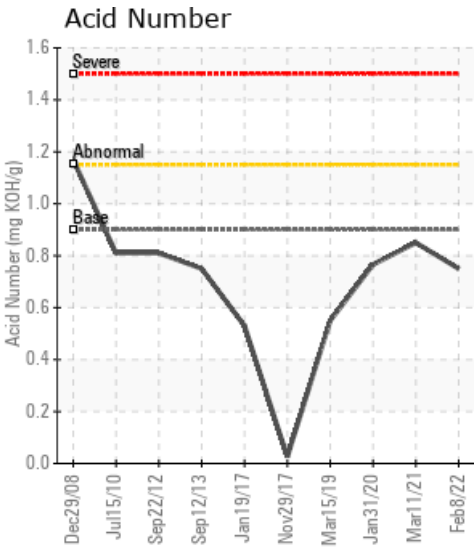
**System Information**  
 System Volume: 400 ltr  
 Bulk Operating Temp: 270F / 132C  
 Heating Source:  
 Blanket:  
 Fluid: PETRO CANADA PURITY FG HEAT TRANSFER FLUID  
 Make: WANSON

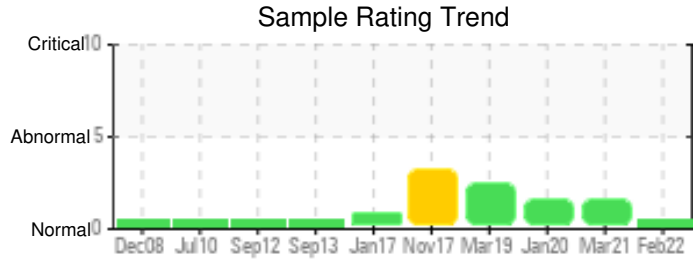
**Sample Information**  
 Lab No: 02471931  
 Analyst: Bill Quesnel CLS,OMA II,MLA-III,LLA-I  
 Sample Date: 02/08/22  
 Received Date: 02/14/22  
 Completed: 02/24/22  
 Bill Quesnel CLS,OMA II,MLA-III,LLA-I

Recommendation: Fluid condition is acceptable for time in service. Resample at next normal interval.

Comments:

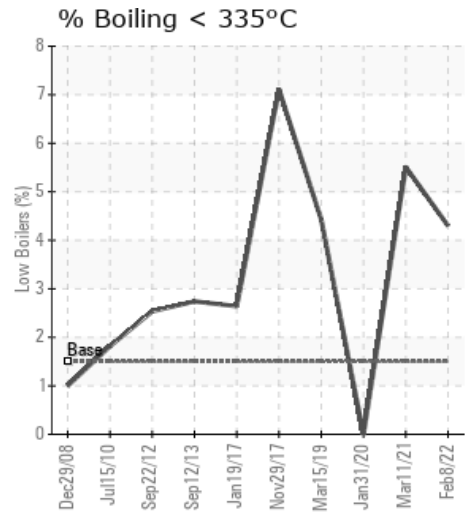
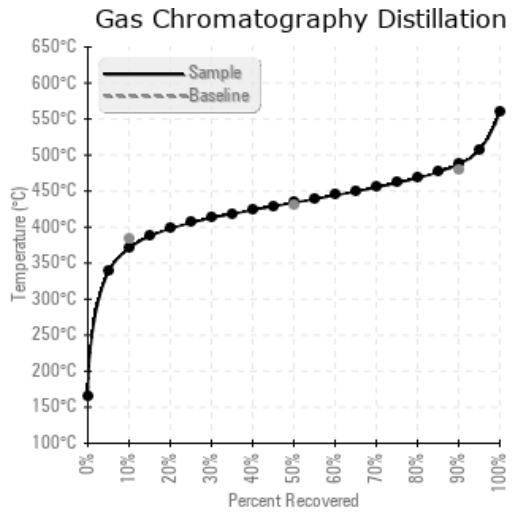
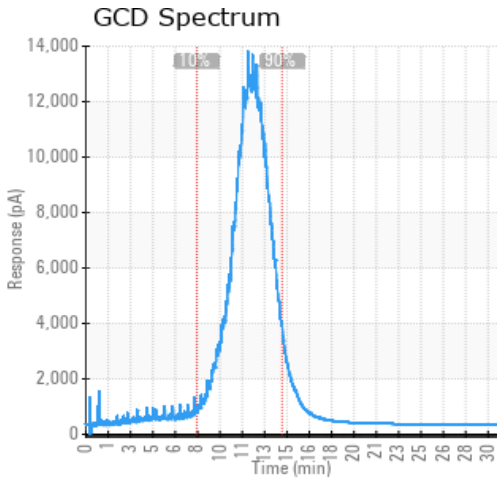
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
02/08/22	02/14/22	13.0y		414 / 212	29.1	33.0	0.75	0.143	699 / 371	813 / 434	909 / 487	4.30
03/11/21	03/16/21	12.0y		381 / 194	17.3	25.0	0.85	0.185	679 / 360	802 / 428	917 / 492	5.51
01/31/20	02/11/20	11.0y		327 / 164	19.1	31.2	0.766	0.141	740 / 393	821 / 439	904 / 484	0.00
03/15/19	03/21/19	10.0y		352 / 178	53.6	32.1	0.55	0.527	688 / 365	805 / 429	893 / 479	4.43
11/29/17	12/05/17	8.5y		284 / 140	7.0	26.8	0.026	0.108	665 / 352	804 / 429	918 / 492	7.11
<b>Baseline Data</b>				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	
02/08/22	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	82	3	
03/11/21	86	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	77	7
01/31/20	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	2
03/15/19	278	0	0	0	0	1	0	0	0	0	4	0	0	0	0	0	2	0	0	0	1	0	142	18	
11/29/17	14	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
Baseline Data			0	0						0			0	0				0	0				230		

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



Historical Comments	
03/11/21	Oil appears to be fit for further service. Suggest sample at next scheduled maintenance interval. (GCD) 90% Distillation Point is marginally high. COC Flash Point is marginally low.
01/31/20	Lowering of COC Flash Pt and some evidence of light end molecules in spectrum. As has previously been done with this product try and vent off (safely) the light ends and recover the flash point. Operating temperature of 135C and the flash point are still 30C apart, so flash point cannot afford to drop. Must look to recover flash point for further use (GCD) % < 335°C measurement of 0.00% by far too low, as flash point indicates high number of light molecules.
03/15/19	Iron levels high and maybe a result of some wear, please investigate. Phosphorus levels untypical for this fluid (PURITY FG HTF), has an alternative product been used to top up the system in error? COC recovered from previous sample albeit it still low. Pentane insoluble showing deterioration in the fluid also Iron ppm levels are abnormal. Pentane Insolubles levels are abnormally high. COC Flash Point is abnormally low.
11/29/17	COC Flash Point is severely low. (GCD) 90% Distillation Point is marginally high. (GCD) 10% Distillation Point is marginally low. Some low boilers are present and Venting is recommended. Otherwise the fluid is in good conditions. COC Flash Point is severely low. (GCD) 90% Distillation Point is marginally high. (GCD) 10% Distillation Point is marginally low.

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