

# WANSON TPC 850 LN MP

**Customer: PTRHTF40072**  
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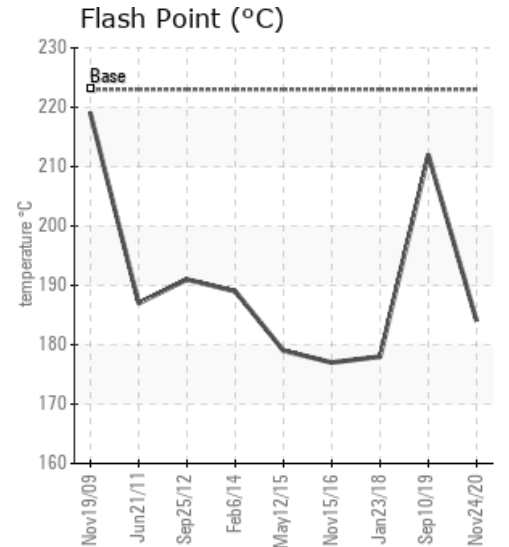
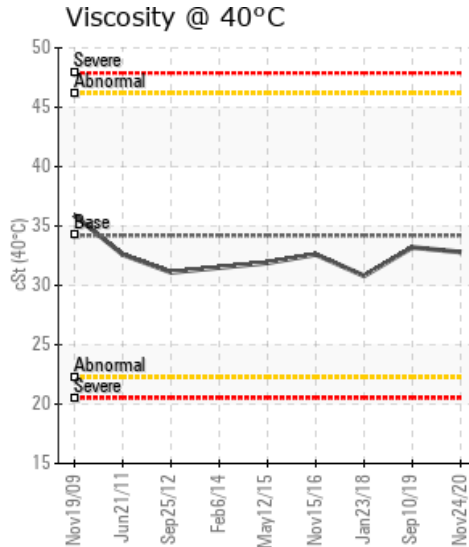
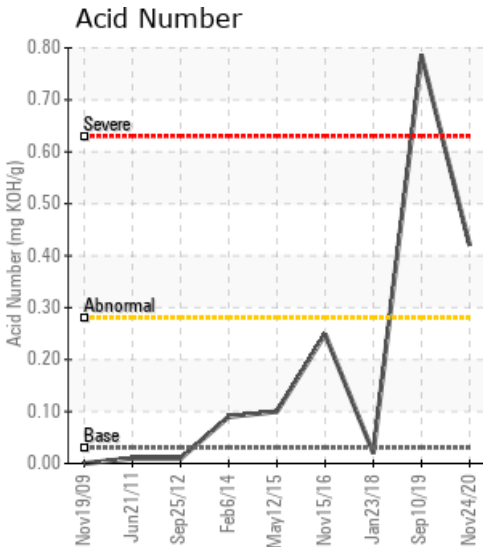
**System Information**  
 System Volume: 1600 ltr  
 Bulk Operating Temp: 160F / 71C  
 Heating Source:  
 Blanket:  
 Fluid: PETRO CANADA PETRO-THERM  
 Make: WANSON

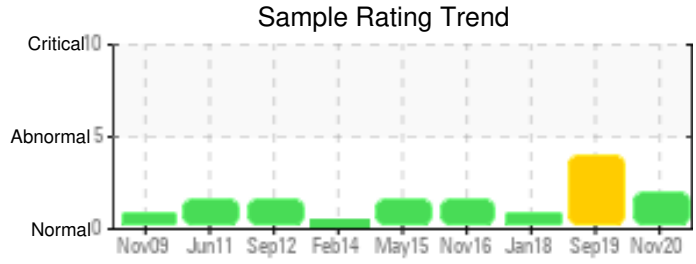
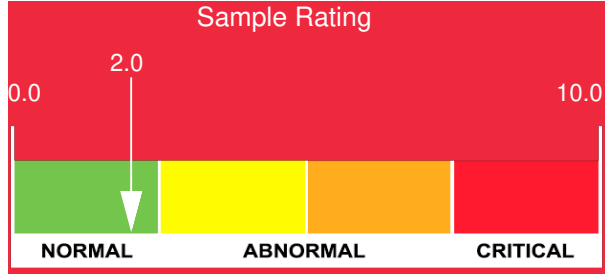
**Sample Information**  
 Lab No: 02390712  
 Analyst: Matthias Voss  
 Sample Date: 11/24/20  
 Received Date: 12/02/20  
 Completed: 12/08/20  
 Matthias Voss  
 Matthias.Voss@petrocanadalsp.com

Recommendation: Clarify high acid number. All other parameters show, that fluid is fit for further use.

Comments: Acid Number (AN) is abnormally high. COC Flash Point is marginally low.

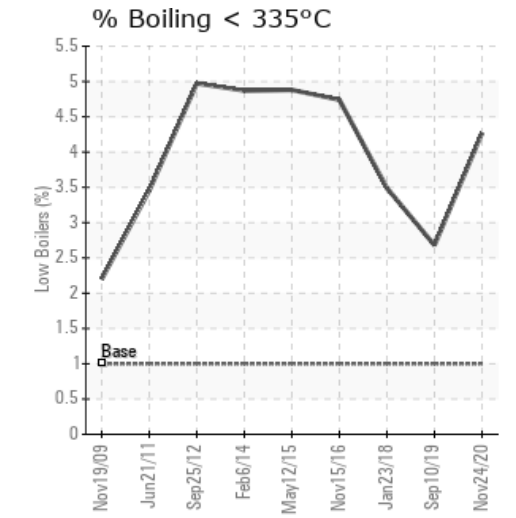
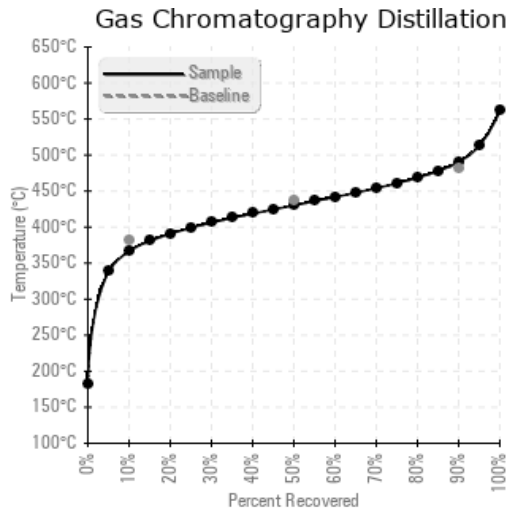
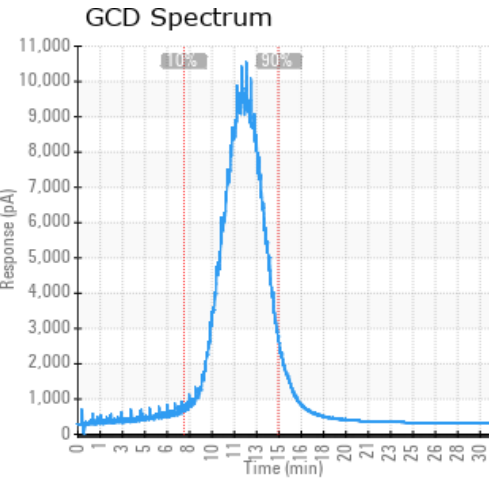
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
11/24/20	12/02/20	11y		363 / 184	29.3	32.8	0.42	0.298	692 / 367	806 / 430	914 / 490	4.27
09/10/19	09/19/19	10y		414 / 212	23.6	33.2	0.786	0.281	704 / 373	818 / 437	926 / 497	2.68
01/23/18	01/29/18	8y		352 / 178	0.8	30.8	0.02	0.266	683 / 362	793 / 423	892 / 478	3.49
11/15/16	11/24/16	7y		351 / 177	43.9	32.6	0.249	0.114	682 / 361	807 / 430	923 / 495	4.74
05/12/15	05/15/15	6y		354 / 179	14.7	31.9	0.10	0.059	682 / 361	808 / 431	925 / 496	4.88
Baseline Data				433 / 223		34.2	0.03		720 / 382	817 / 436	900 / 482	1.00





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	
11/24/20	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
09/10/19	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
01/23/18	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
11/15/16	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05/12/15	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
Baseline Data			0	0						0			0	0					0				0		

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



Historical Comments	
09/10/19	Acid Number high linked to degradation of fluid. Likely to increase over time and affect condition of the oil. Marginal increase in viscosity noted which is in line. Recommend monitoring with view to change in case of fast deterioration. Acid Number (AN) is severely high. (GCD) 90% Distillation Point is marginally high.
01/23/18	COC Flash point low, but in line with previous samples. Viscosity has dropped as has FBP (considerably). Has the system been treated, vented, between samples (lower acid number, water and other GCD parameters coming back in line)? Recommend venting as light ends build up looks to be happening, sample again following to establish if COC heads upwards. Insolubles higher showing evidence of fluid breakdown so must consider oil change in near future as the combination of a number of parameters are falling outside acceptable limits COC Flash Point is abnormally low.
11/15/16	Oil is fit for service. Suggest sample at next scheduled maintenance interval. COC Flash Point is abnormally low. (GCD) 90% Distillation Point is marginally high.
05/12/15	Oil appears to be in good condition and fit for further service. Sample at next scheduled maintenance interval. (GCD) 90% Distillation Point is marginally high. COC Flash Point is marginally low.

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