

WANSON COMBI 1900

Customer: PTRHTF40035
 GEBR HAKVOORT BV
 ZUIDOOSTRAK 2
 FLEVOLAND
 URK, FLE NL
 Attn: Maintenance Manager
 Tel:
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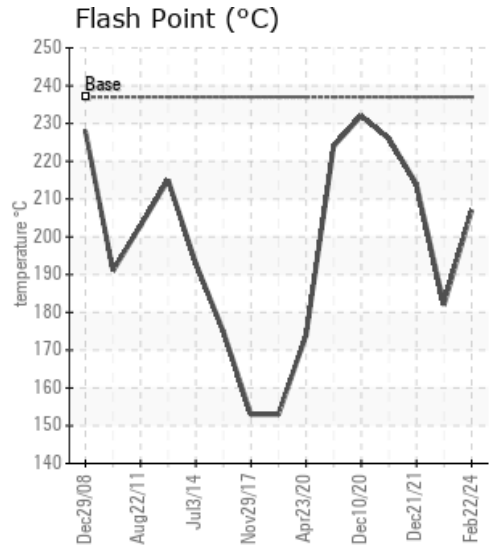
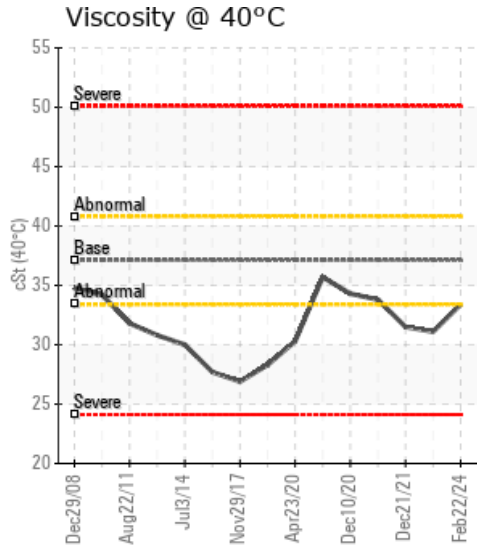
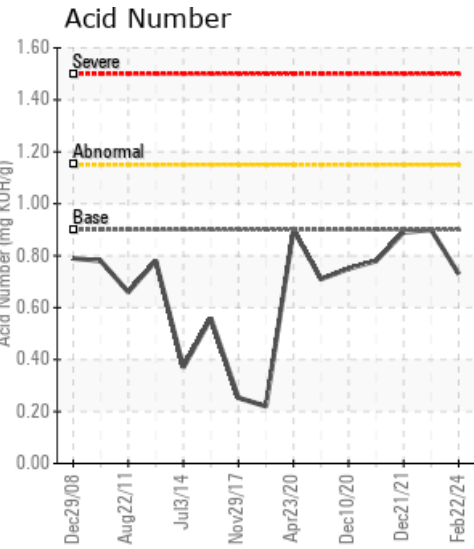
System Information
 System Volume: 1600 ltr
 Bulk Operating Temp: 300F / 149C
 Heating Source:
 Blanket:
 Fluid: PETRO CANADA PURITY FG HEAT TRANSFER FLUID
 Make: WANSON

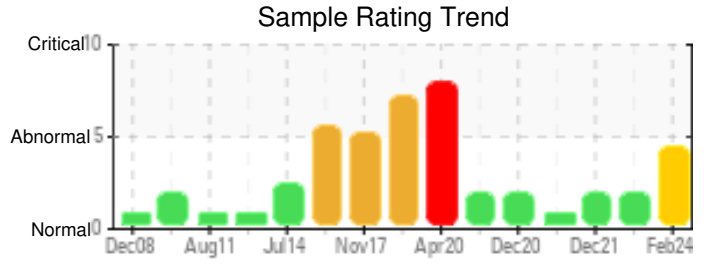
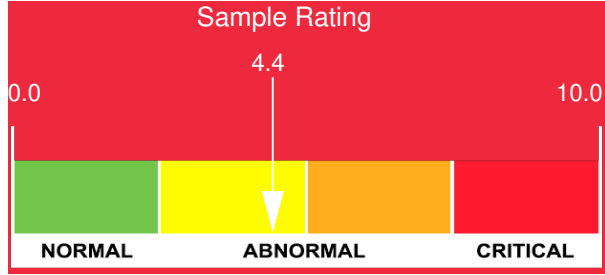
Sample Information
 Lab No: 02618536
 Analyst: Bill Quesnel CLS,OMA II,MLA-III,LLA-I
 Sample Date: 02/22/24
 Received Date: 02/27/24
 Completed: 03/05/24
 Bill Quesnel CLS,OMA II,MLA-III,LLA-I

Recommendation: We recommend that you vent the expansion tank to remove low boilers which assists in restoring the flash point of the fluid. The fluid is suitable for further service. We recommend an early resample to monitor this condition.

Comments: Pentane Insolubles levels are severely high. (GCD) 90% Distillation Point is severely high. COC Flash Point is marginally low.

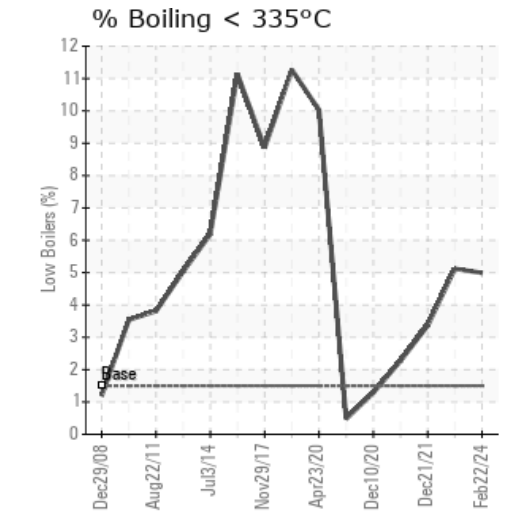
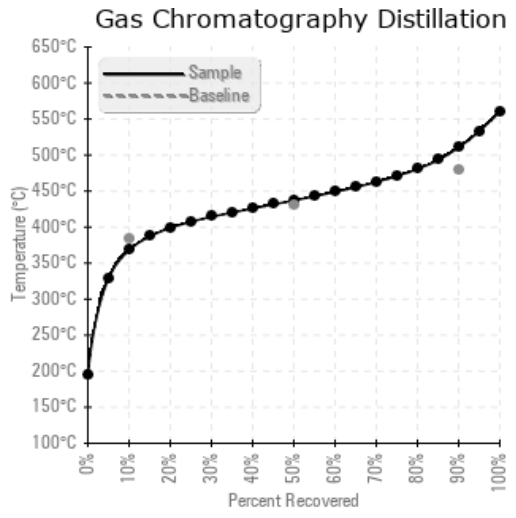
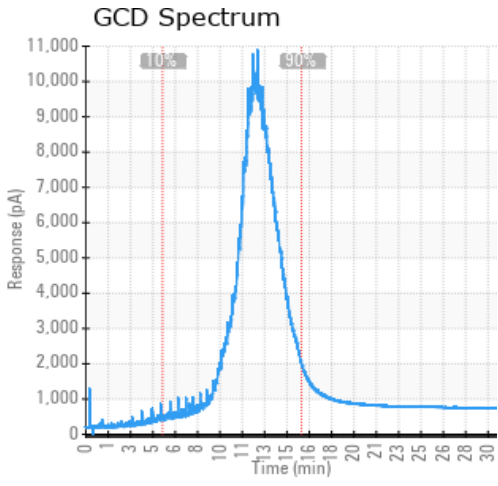
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
02/22/24	02/27/24	3.5y		405 / 207	50	33.4	0.73	0.608	695 / 368	819 / 437	951 / 511	4.99
03/31/23	04/05/23	2.5y		360 / 182	52.0	31.1	0.90	0.186	698 / 370	818 / 437	926 / 497	5.12
12/21/21	12/29/21	1.3y		417 / 214	35.3	31.5	0.89	0.293	715 / 380	821 / 438	929 / 498	3.36
03/11/21	03/16/21	0.5y		439 / 226	33.9	33.8	0.78	0.209	712 / 378	814 / 435	928 / 498	2.27
12/10/20	01/04/21	0.0y		450 / 232	19.2	34.3	0.75	0.069	732 / 389	825 / 441	930 / 499	1.29
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
02/22/24	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	10	1
03/31/23	7	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
12/21/21	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	31	2
03/11/21	16	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	25	2
12/10/20	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	16	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	
03/31/23	We recommend that you vent the expansion tank to remove low boilers which assists in restoring the flash point of the fluid. The fluid is suitable for service. Resample at the next service interval to monitor. (GCD) 90% Distillation Point is abnormally high. COC Flash Point is abnormally low.
12/21/21	Oil is fit for further use. Slowly raising low boilers and lower flash point could indicate early start of thermal cracking. GCD 90 high since the beginning of the last oil change but stable. (GCD) 90% Distillation Point is severely high.
03/11/21	Oil is fit for further use. (GCD) 90% Distillation Point is abnormally high.
12/10/20	Fluid fit for further use. Send in sample at next scheduled interval. (GCD) 90% Distillation Point is severely high.

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