

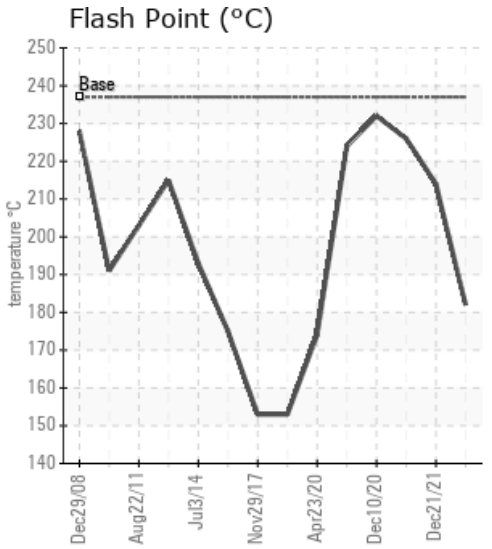
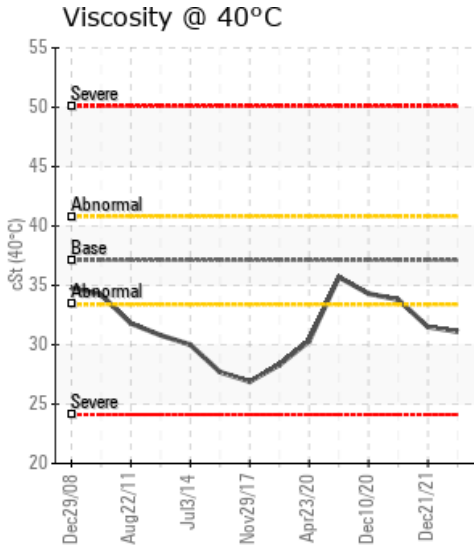
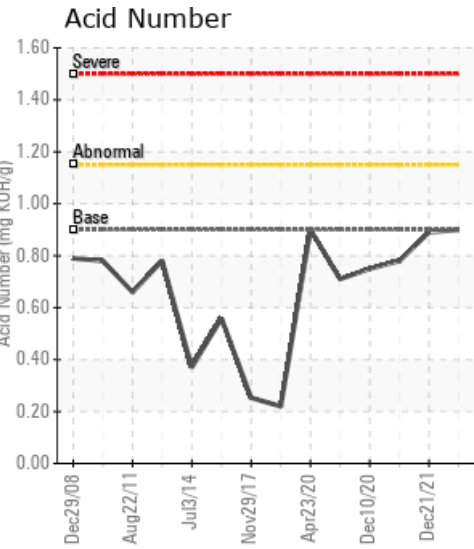
## WANSON COMBI 1900

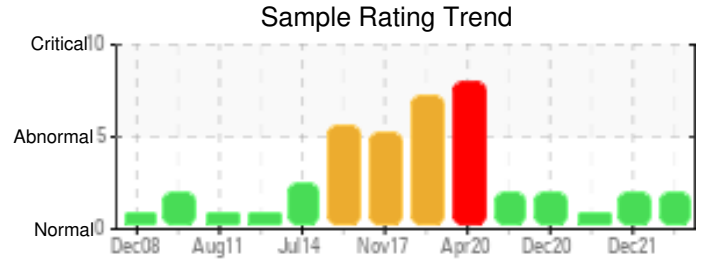
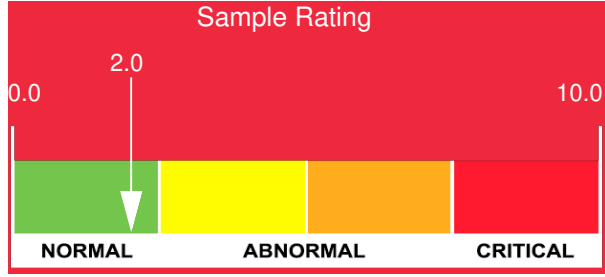
Customer: PTRHTF40035	System Information	Sample Information
GEBR HAKVOORT BV ZUIDOOSTRAK 2 FLEVOLAND URK, FLE NETHERLANDS Attn: Maintenance Manager Tel: E-Mail: w.snyenr@klt.nl	System Volume: 1600 ltr Bulk Operating Temp: 300F / 149C Heating Source: Blanket: Fluid: PETRO CANADA PURITY FG HEAT TRANSFER FLUID Make: WANSON	Lab No: 02550038 Analyst: Bill Quesnel CLS,OMA II,MLA-III,LLA-I Sample Date: 03/31/23 Received Date: 04/05/23 Completed: 04/24/23 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 service. Resample at the next service interval to monitor.

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

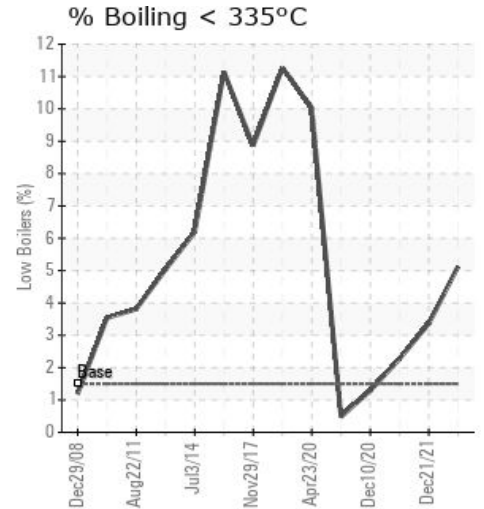
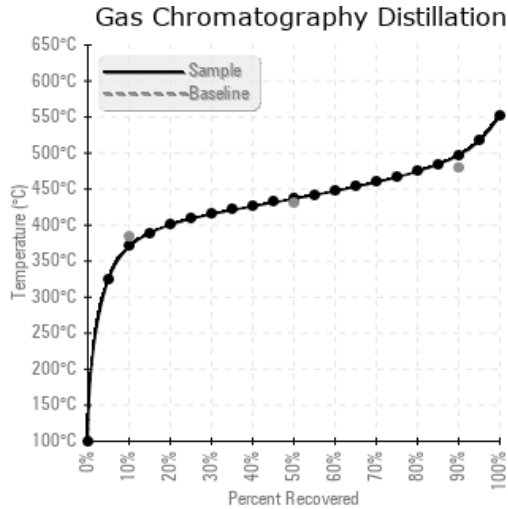
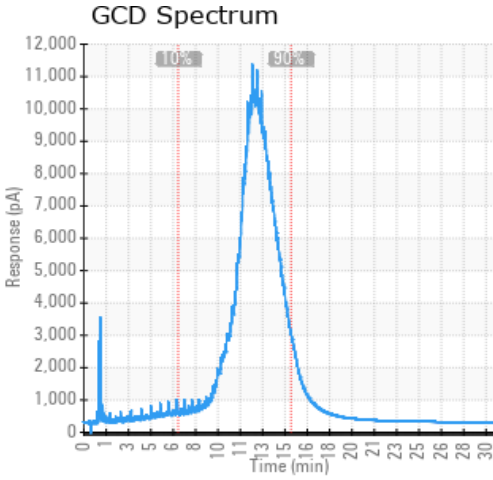
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
03/31/23	04/05/23	2.5y		360 / 182	52.0	31.1	0.90	0.186	698 / 370	818 / 437	926 / 497	5.12
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
09/29/20	10/06/20	1.0y		435 / 224	64.5	35.7	0.71	0.147	738 / 392	826 / 441	931 / 499	0.48
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
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
09/29/20	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	34	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	
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.
09/29/20	Fluid fit for further use. Send in sample at next scheduled interval. (GCD) 90% Distillation Point is severely high.

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