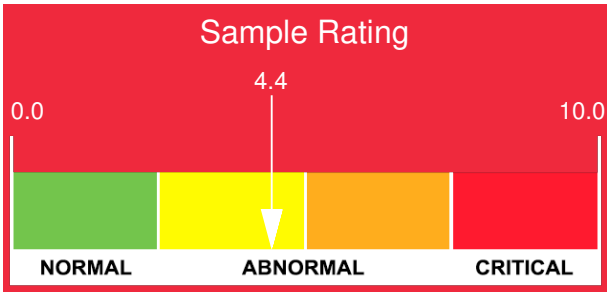
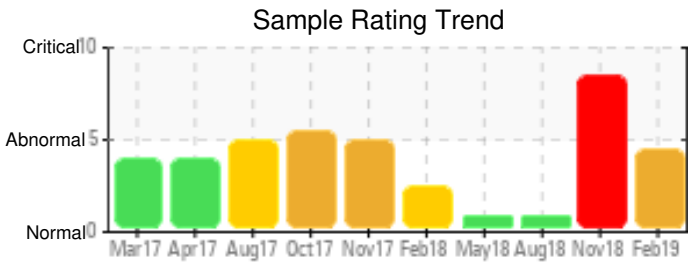
PETRO-CANADA LUBRICANTS





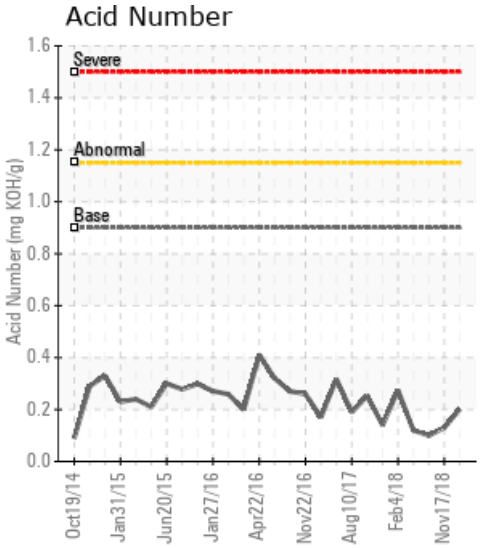
RETURN CARGILL MEAT THAILAND

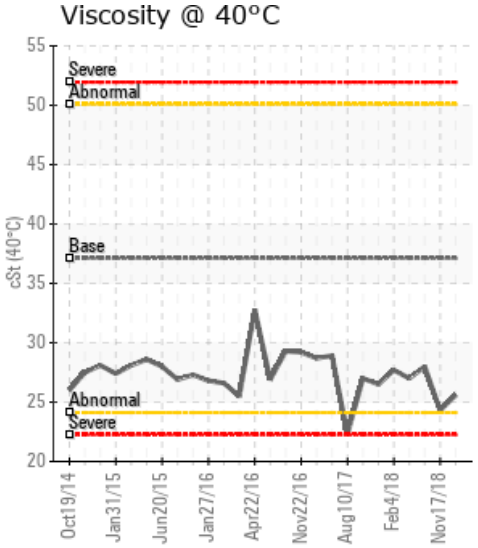
Customer: PTRHTF60010	System Information	Sample Information
SYNLUBE INTERNATIONAL CO LTD 76/1 MOO.7 THACHIN MUANG SAMUTSAKHON, 74000 THAILAND Attn: CHERNPORN CHOBKUI Tel: 034421290 E-Mail: chernporn@synlube.co.th	System Volume: 20910 ltr Bulk Operating Temp: 554F / 290C Heating Source: Blanket: Fluid: PETRO CANADA PURITY FG HEAT TRANSFER FLUID Make: WANSON	Lab No: 02266853 Analyst: Yutong Gao Sample Date: 02/01/19 Received Date: 02/08/19 Completed: 02/14/19

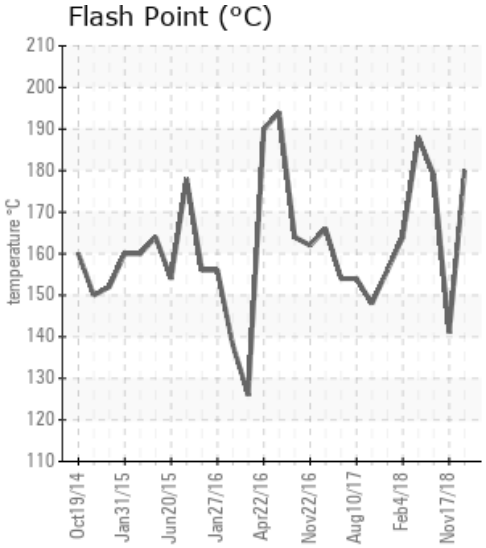
Recommendation: The current fluid has acceptable viscosity, flash point and the distillation points. The water and solid content are all very low. As a routine, please conduct the system venting in a regular base. Take one sample in 6 months to monitor the conditions.

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	%
02/01/19	02/08/19	0m		356 / 180	16.7	25.6	0.201	0.018	636 / 335	776 / 413	872 / 467	9.43
11/17/18	11/27/18	31m		286 / 141	10.9	24.3	0.13	0.022	603 / 317	731 / 388	823 / 439	14.48
08/25/18	09/05/18	28m	RETURN	354 / 179	7.2	28.0	0.10	0.022	674 / 356	800 / 427	897 / 481	6.22
05/23/18	06/12/18	25m	SUPPLY/RETURN	370 / 188	8.5	27.0	0.12	0.043	684 / 362	805 / 429	901 / 483	5.45
02/04/18	02/26/18	22m		327 / 164	0.00	27.7	0.274	0.022	685 / 363	787 / 419	868 / 464	3.98
11/01/17	11/14/17	19m		313 / 156	9.8	26.5	0.14	0.028	670 / 354	779 / 415	869 / 465	5.10
Baseline Data				459 / 237		37.12	0.90		721 / 383	807 / 431	892 / 478	1.5







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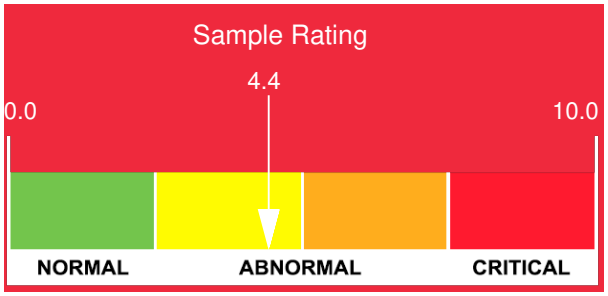
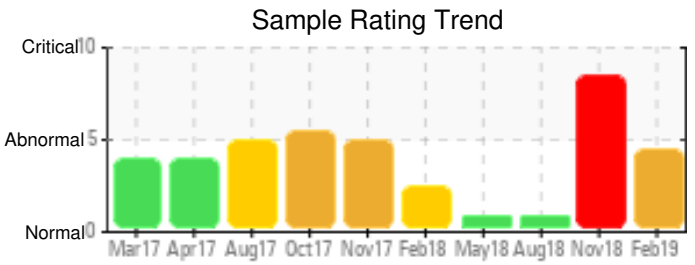
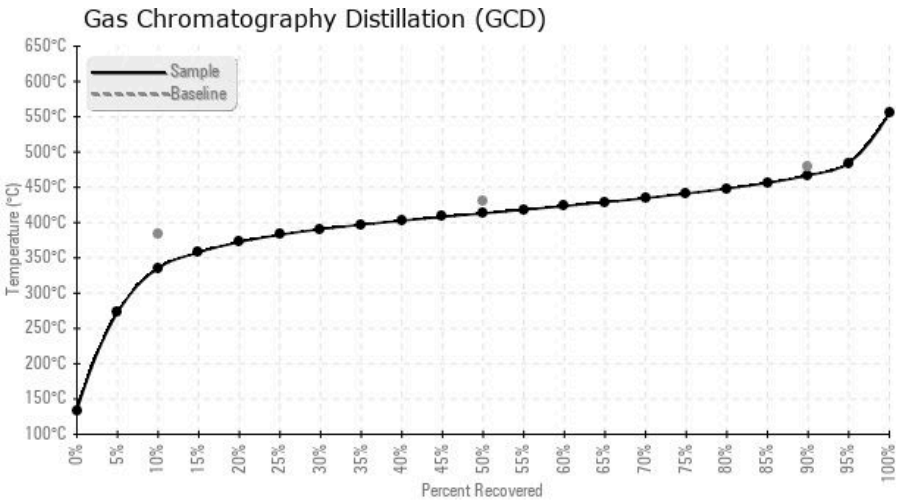
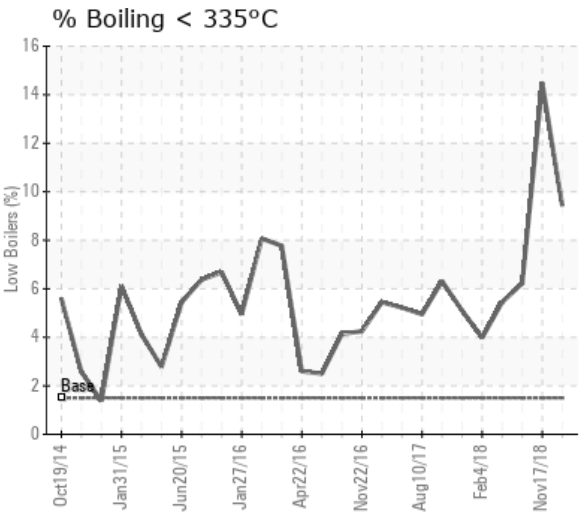




Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
02/01/19	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	1
11/17/18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	3
08/25/18	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0
05/23/18	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0
02/04/18	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0
11/01/17	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0
Baseline Data			0	0						0			0	0					0				230	

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





Historical Comments

11/17/18	The current fluid has low viscosity, low flash point due to the severe thermal cracking at high bulk working temperature. Please conduct the effective system venting to release the low boiler. The acid number and solid content are all very low indicating minimum oxidation and minimum system deposit. Please take one sample in 4 months to monitor the conditions. (GCD) 10% Distillation Point is severely low. (GCD) 90% Distillation Point is severely low. COC Flash Point is severely low. (GCD) % < 335°C is abnormally high. (GCD) 50% Distillation Point is abnormally low.
08/25/18	The current fluid conditions are very similar to the last sample in May. There are minimum third party contaminations such as water or dirty. The acid number and solid contents are very low, meaning minimum oxidation. The flash point is considered low due to thermal cracking at ~290C bulk working temperature. Please continue to do the system venting as a routine maintenance schedule. Please take one sample in 6 months to monitor the conditions. COC Flash Point is abnormally low.
05/23/18	The currently fluid has experienced severe thermal cracking at the extremely high bulk working temperature. However, the fluid flash point is higher than the previous three used oil samples, so the overall fluid conditions are improving. Please continue to do the effective system venting and take one sample in 6 months to monitor the conditions COC Flash Point is abnormally low.
02/04/18	The current fluid has normal distillation points, the acid number and solid contents are all very low. However, the flash point is still much lower than the fresh fluid due to the thermal cracking at the extremely high bulk working temperature. Please do a long and effective system venting and take one sample in 6 months to monitor the conditions. COC Flash Point is severely low.
11/01/17	The current fluid has very low acid number, normal distillation point, and minimum water and solid particles. However, the viscosity and flash point are still much lower than the fresh fluid due to the thermal cracking at 290C bulk temperature. The flash point is higher than the last sample on Oct 13th, so please continue to do the effective system venting, and take one sample in 4 months to verify the conditions.