

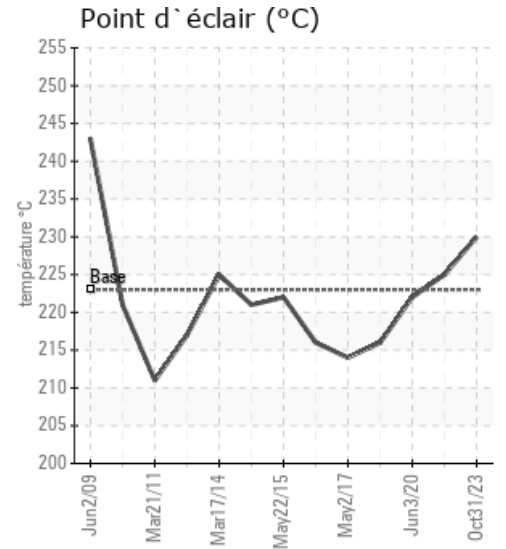
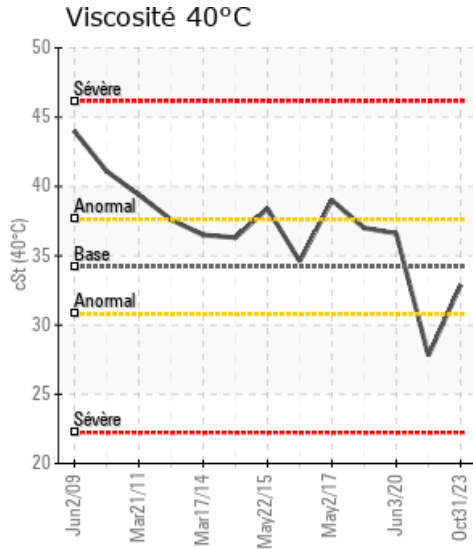
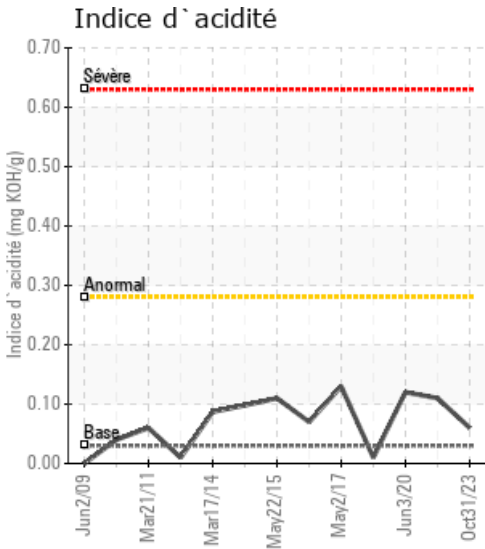
2X81-CH-01

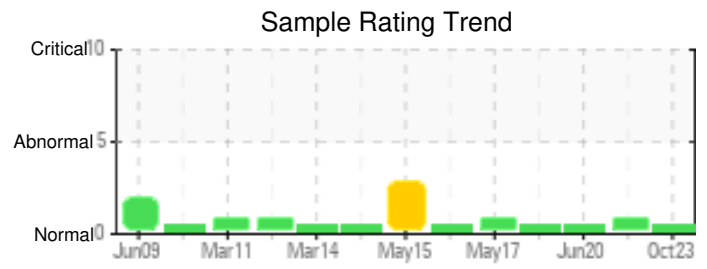
Customer: PTRHTF30038	System Information	Sample Information
BUILDING PRODUCTS OF CANADA 9510 ST PATRICK STREET LASALLE, QC H8R 1R9 CA Attn: Marc Legault Tel: (514)364-7586 E-Mail: mlegault@bpcan.com	System Volume: 1215 ltr Bulk Operating Temp: 489F / 254C Heating Source: Blanket: Fluid: PETRO CANADA PETRO-THERM Make: ACME	Lab No: 02595922 Analyst: Jean Lacharite Sample Date: 10/31/23 Received Date: 11/13/23 Completed: 11/16/23 Jean Lacharite jean.lacharite@HFSinclair.com

Recommendation: All results are ok for wear, viscosity, AN, Flash point, insolubles and GCD 10, 50, 90%. GCD graphic is good. continue the operation.

Comments:

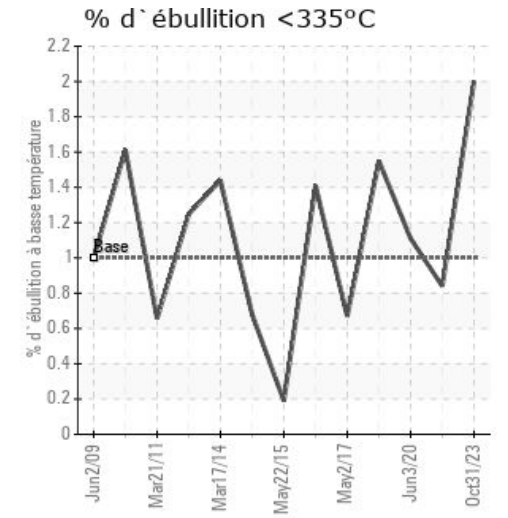
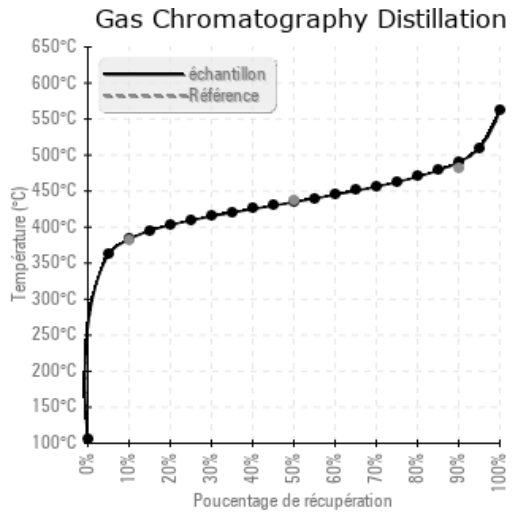
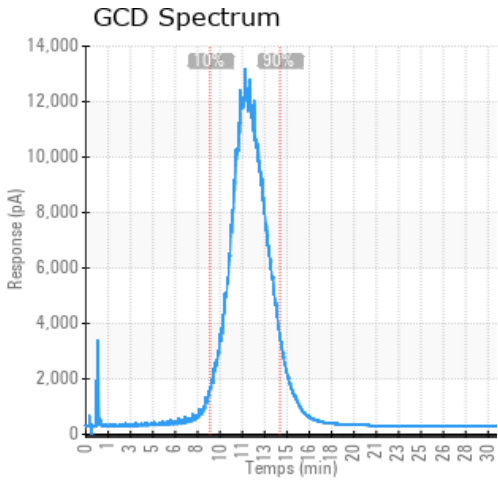
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
10/31/23	11/13/23	0.0m	DANS LE CIRCUIT	446 / 230	22.8	32.9	0.06	0.322	722 / 383	815 / 435	914 / 490	2.00
03/18/21	03/26/21	0.0m	dans le circuit	437 / 225	8.7	27.8	0.11	0.168	720 / 382	811 / 433	923 / 495	0.84
06/03/20	06/04/20	3.0m	CIRCUIT	432 / 222	9.7	36.6	0.12	0.208	721 / 383	809 / 432	895 / 480	1.11
04/03/18	05/03/18	0.0m		421 / 216	16.8	37.0	0.01	0.262	714 / 379	810 / 432	912 / 489	1.55
05/02/17	05/12/17	0.0m	ENTREE DE LA POMPE	417 / 214	9.1	39.0	0.130	0.312	726 / 386	821 / 439	929 / 499	0.67
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
10/31/23	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/18/21	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06/03/20	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/03/18	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05/02/17	0	0	1	0	0	0	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0
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	
03/18/21	le Vanadium indique =2 il peut y avoir une présence de bitume. Le soufre est élevé. Les autres éléments sont normaux. La viscosité est toujours dans le standard mais elle est à surveiller. Results are good, continue the operation.
06/03/20	Il y a trace de bitume dans l'huile. Il y a du soufre dans l'huile (770 ppm), assurez-vous de faire tout transvasage du fluide caloporteur à partir d'une pompe dédiée à cet effet. L'huile est OK, pour usage continu. Reprendre un échantillon à la date prévue.
04/03/18	Il y a une trace de bitume (asphalt) dans l'huile. Reprendre un échantillon à intervalle normal
05/02/17	Il y a présence d'asphalte dans l'échantillon, les Fractions Lourdes GCD @90% sont élevés, une augmentation des Fractions Lourdes engendre une augmentation de la viscosité et favorise la formation de dépôt de carbone. (GCD) 90% Distillation Point is abnormally high.

Petro-Canada makes no representation or warranty of any kind, either express or implied, as to the accuracy or completeness of the analysis and assumes no responsibility and shall have no liability whatsoever with respect to such analysis, or a party's use of it. Petro-Canada is a division of HollyFrontier Corporation.