

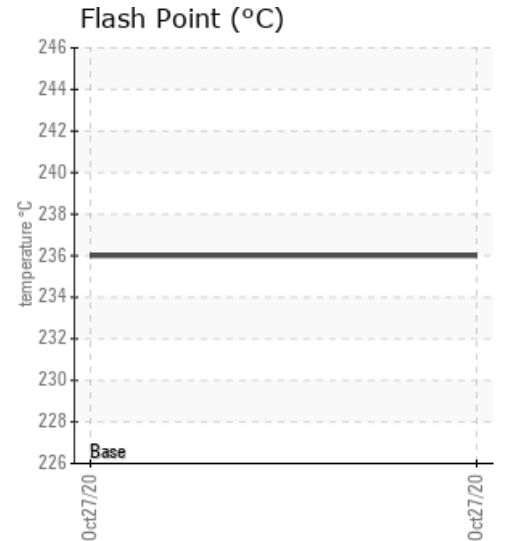
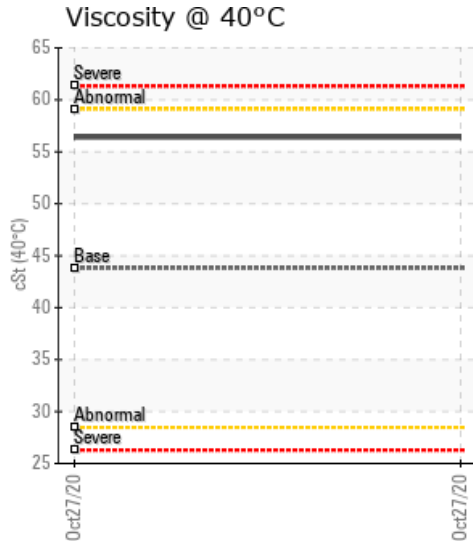
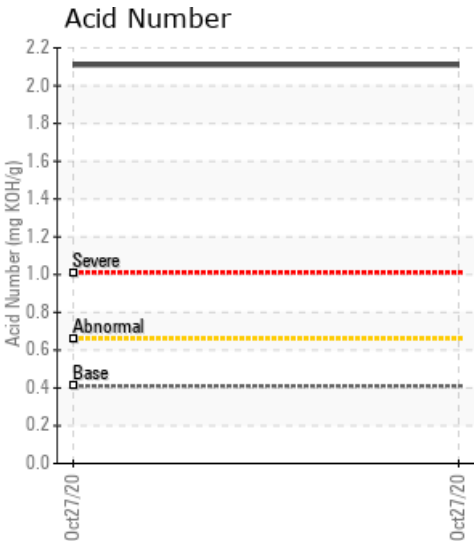
HUILE THERMIQUE

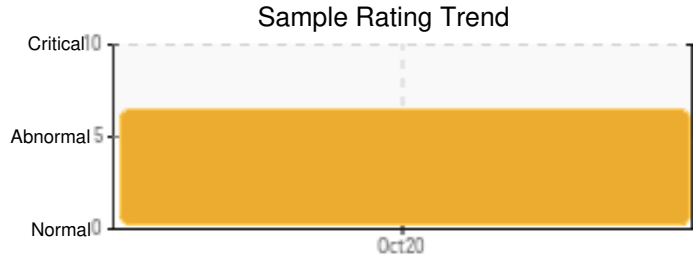
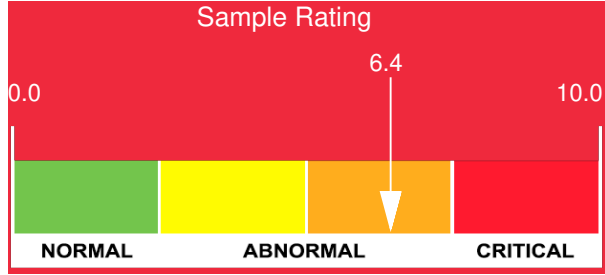
Customer: PTRHTF30160	System Information	Sample Information
BETON PROVINCIAL LTEE. C.P. 160-1825 DE PHARE OUEST MATANE, QC G4W 3N1 Canada Attn: Frederic Noel Tel: (418)580-9385 E-Mail: f.noel@betonprovincial.com	System Volume: 0 gal Bulk Operating Temp: Not Specified Heating Source: Blanket: Fluid: HEAT TRANSFER FLUID ISO 46 Make:	Lab No: 02385534 Analyst: Pierre Castagne Sample Date: 10/27/20 Received Date: 11/05/20 Completed: 11/12/20 Pierre Castagne pierre.castagne@petrocanadalsp.com

Recommendation: La teneur en acide est très élevée Acid Number (AN) 2.11. La teneur en eau est élevée (ppm Water) 903.0. La viscosité de l'huile a augmenté de ISO VG 46 à 56.4. Les fractions lourdes (GCD @ 90%) sont élevés. Les solides (Pentane Insolubles) sont élevés 0.501. Compte tenu des résultats nous vous recommandons de nettoyer, rincer le système et de remplir le système avec de l'huile caloporteur neuve.

Comments:

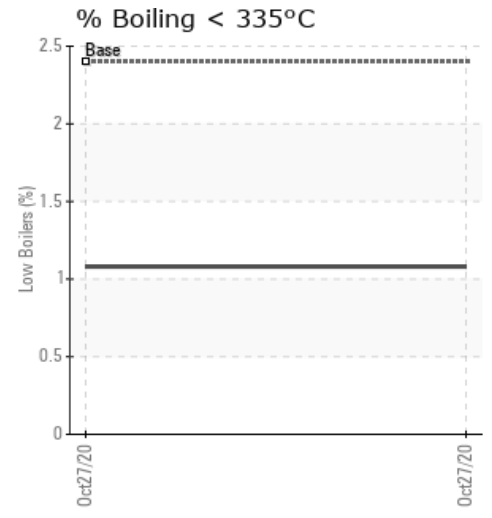
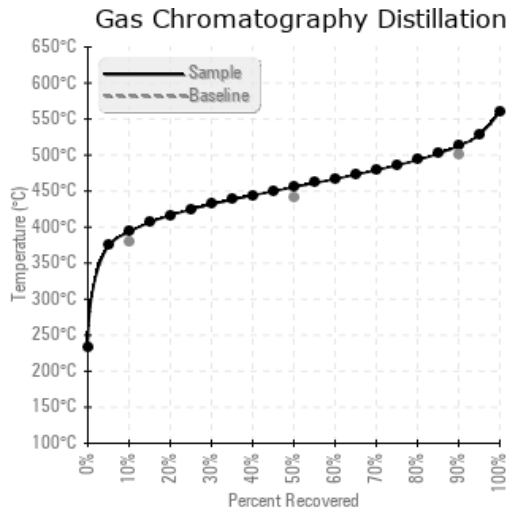
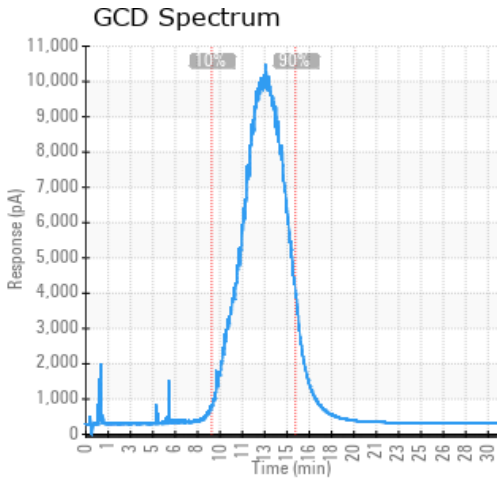
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
10/27/20	11/05/20	0h		457 / 236	903.0	56.4	2.11	0.501	740 / 393	852 / 456	955 / 513	1.08
Baseline Data				414 / 212		43.8	0.41		716 / 380	826 / 441	932 / 500	2.4





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
10/27/20	8	0	0	0	0	7	0	0	0	0	0	6	1	0	0	0	0	0	1	0	1	0	1	4
Baseline Data			0	0						0			0	0					5				250	

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



Historical Comments

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.