

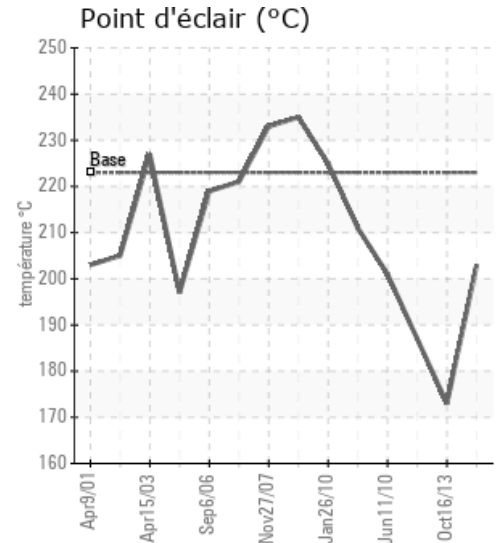
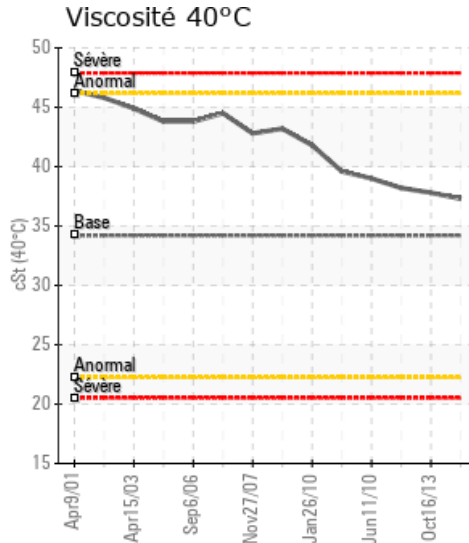
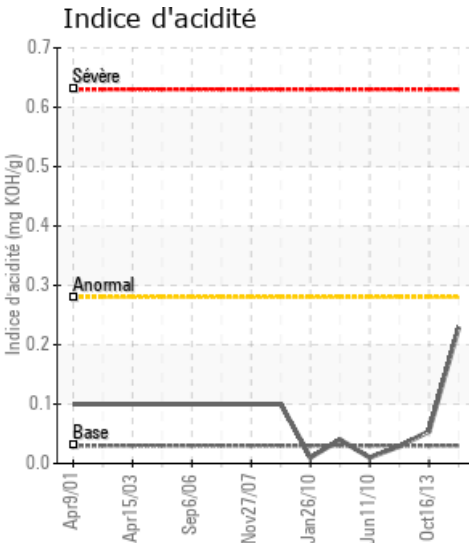
SECHOIR

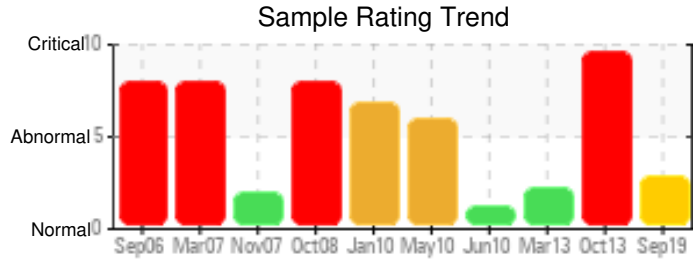
Customer: PTRHTF30031	System Information	Sample Information
PRODUITS FORESTIERS ARBEC 775 122E RUE ST-GEORGE-DE-CHAMPLAIN, QC G9T 5K7 Canada Attn: Eric Bedard Tel: E-Mail: ebedard@arbec.ca	System Volume: 40000 ltr Bulk Operating Temp: 269F / 132C Heating Source: Blanket: Fluid: PETRO CANADA PETRO-THERM Make: GTS	Lab No: 02311157 Analyst: Pierre Castagne Sample Date: 09/24/19 Received Date: 09/26/19 Completed: 10/16/19

Recommandation: les fractions légères (GCD @10%) sont très basses. Je vous conseille de ventiler le système.

Comments:

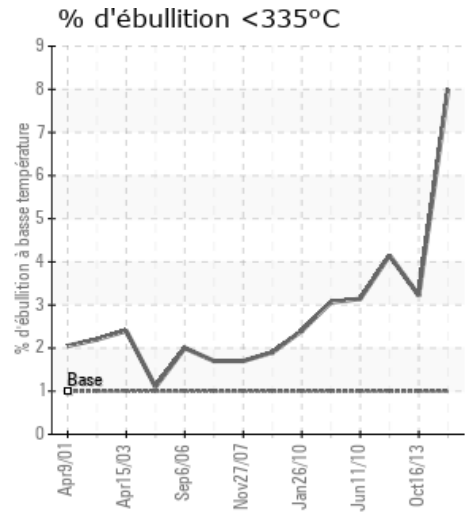
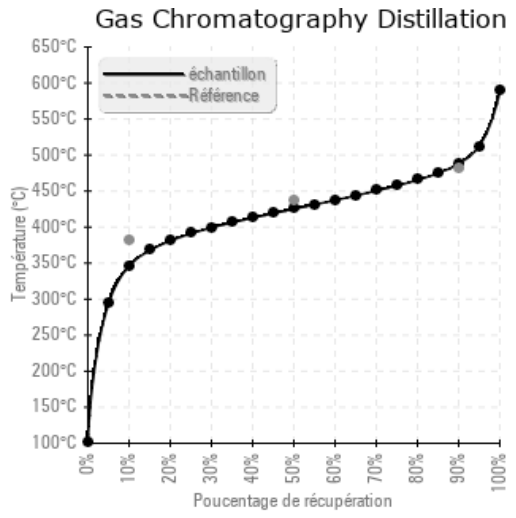
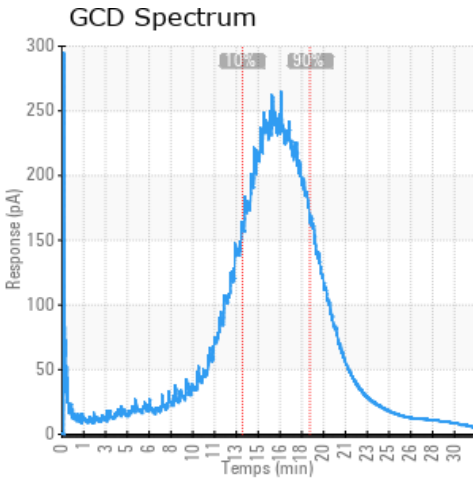
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
09/24/19	09/26/19	21h		397 / 203	46.8	37.3	0.229	0.133	655 / 346	797 / 425	910 / 488	8.00
10/16/13	10/23/13	0h	ERIC BEDARD	343 / 173	68.1	37.8	0.054	0.049	706 / 374	830 / 443	938 / 503	3.22
03/12/13	04/02/13	0h	DRAIN PLUG	369 / 187	96.0	38.2	0.029	0.234	697 / 370	826 / 441	938 / 503	4.15
06/11/10	06/23/10	2h	320	394 / 201	108	39	0.01	0.059	704 / 373	814 / 435	904 / 484	3.142
05/11/10	05/17/10		SECHOIR 3	412 / 211	153	39.6	0.04	0.094	705 / 374	815 / 435	904 / 485	3.064
01/26/10	02/02/10	21h		437 / 225	155	41.8	0.01	0.131	714 / 379	826 / 441	916 / 491	2.4
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
09/24/19	3	0	0	0	0	2	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	1	0
10/16/13	38	0	0	0	0	0	0	0	0	0	0	59	0	0	0	0	1	0	0	0	6	0	20	4
03/12/13	49	0	0	0	0	0	0	0	0	0	1	74	0	0	0	0	0	0	0	0	6	0	23	5
06/11/10	34	0	0	0	0	0	0	0	0	0	0	39	0	0	0	0	0	0	0	0	4	0	18	3
05/11/10	73	0	0	1	0	3	0	0	0	0	1	72	0	0	0	0	1	0	1	0	11	0	25	8
01/26/10	82	0	0	0	0	2	0	0	0	0	2	80	0	0	0	0	0	0	0	0	7	0	23	6
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	
10/16/13	L'échantillon ressemble au dernier à tous les niveaux. SVP re-échantillonnez dans 6-9 mois.
03/12/13	La condition générale de l'huile est acceptable. La présence élevée de sodium est surprenante mais pas trop inquiétante puisque les échantillons précédents montrent tous du sodium. SVP re-échantillonnez dans 1 an. Sodium ppm levels are severely high. (GCD) 90% Distillation Point is severely high. COC Flash Point is marginally low.
06/11/10	L'huile caloporteuse est en bonne condition. Nous recommandons de re-échantillonner vers la fin de 2010
05/11/10	L'huile est en bonne condition en ce moment et on observe peu de changement depuis le dernier échantillon. SVP re-échantillonner vers la fin de 2010.
01/26/10	La viscosité de l'huile se rapproche tranquillement de la Petro-Therm au fil des ans. Les autres paramètres semblent normaux. Nous recommandons d'échantillonner de nouveau vers la fin de 2010 (~9 mois). GA

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.