

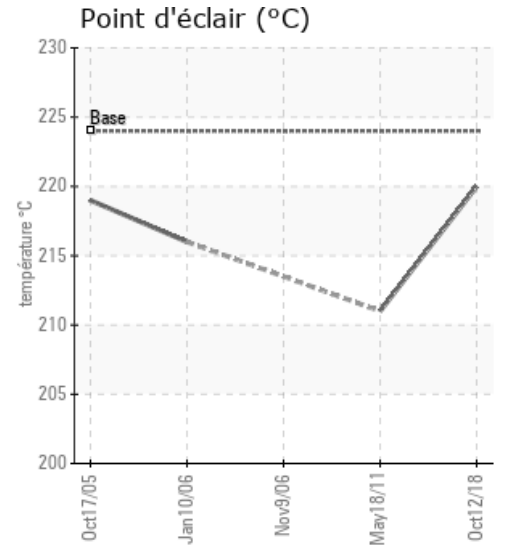
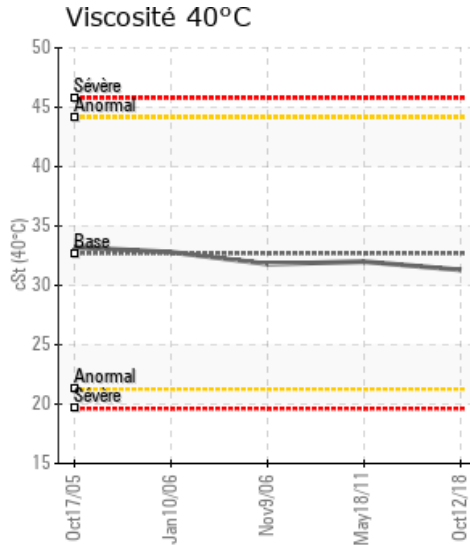
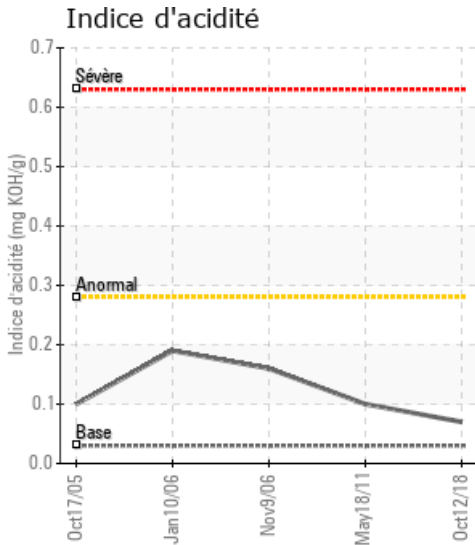
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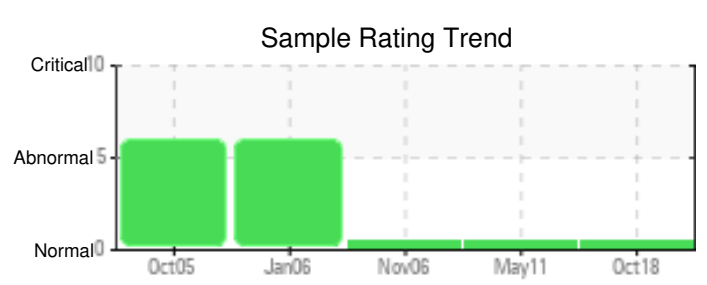
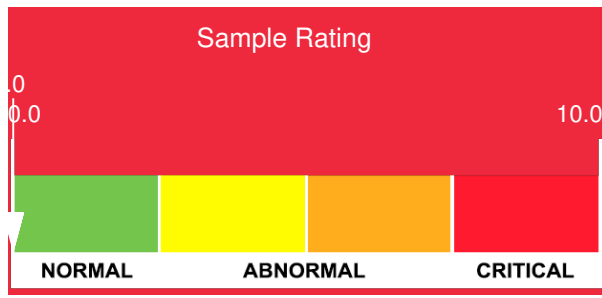
Customer: PTRHTF30002	System Information	Sample Information
Alcoa - Aluminerie Deschambeau 1 Boulevard Des Sources DESCHAMBAULT, QC G0A 1S0 Canada Attn: Claude Jean Tel: (418)286-5219 E-Mail:	System Volume: 5000 ltr Bulk Operating Temp: 226F / 108C Heating Source: Blanket: Fluid: PETRO CANADA CALFLO AF Make:	Lab No: 02245586 Analyst: Claude Bureau Sample Date: 10/12/18 Received Date: 10/17/18 Completed: 10/29/18 To discuss this report contact Claude Bureau at (438)863-7577

Recommendation: Tous les paramètres sont normaux. Nous recommandons de continuer de suivre la procédure habituelle de ventilation des fractions légères à travers le réservoir d'expansion. SVP ré-échantillonner dans 9 à 12 mois et faire analyser pour suivre l'évolution des fractions légères dans le system caloporteur.

Comments: Aucuns métaux d'usures détectés Aucune contamination détectée L'huile est en bonne condition d'opération.

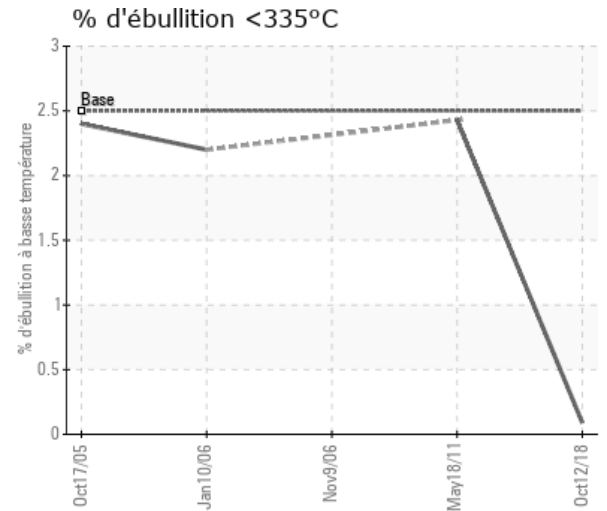
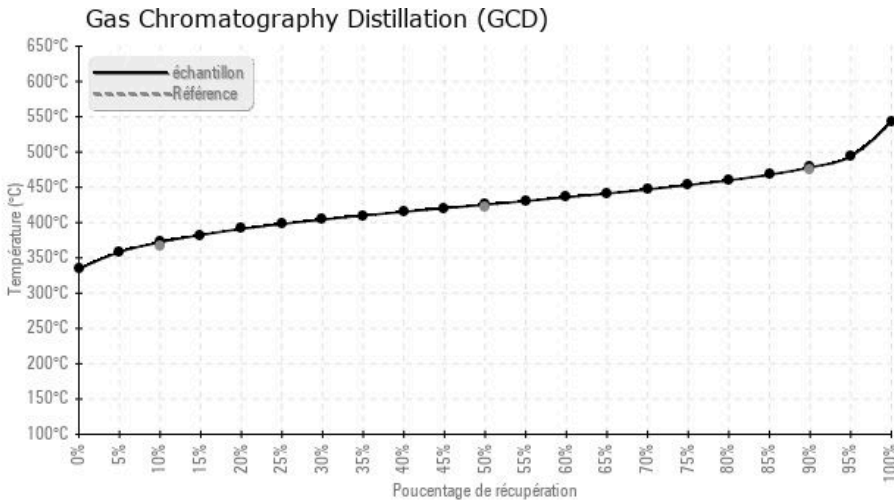
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
10/12/18	10/17/18	0y		428 / 220	56.0	31.3	0.07	0.140	702 / 372	798 / 425	893 / 478	0.09
05/18/11	05/24/11			412 / 211	77	32	0.1	0.025	695 / 368	794 / 423	890 / 477	2.429
11/09/06	11/23/06					31.8	0.16					
01/10/06	01/16/06			421 / 216	310	32.8	0.19		696 / 369		885 / 474	2.2
10/17/05	11/07/05			426 / 219	130	33.2	0.1		691 / 366		883 / 473	2.4
Baseline Data				435 / 224		32.7	0.03		693 / 367	790 / 421	887 / 475	2.5





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	
10/12/18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76	0	
05/18/11	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	70	0	
11/09/06	0	1	0	0	0	0	0	0	0	0	3	0		0	0		0		0	0	0	0	48	0	
01/10/06	0	0	0	0	0	0	0	0	0	0	8	71		0	0		0		0	0	0	0	150	0	
10/17/05	9	0	0	0	0	0	0	0	0	0	4	119		0	0		0		0	1	0	0	214	0	
Baseline Data			0	0						0			0	0					0					270	

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



Historical Comments

05/18/11	
11/09/06	
01/10/06	
10/17/05	