

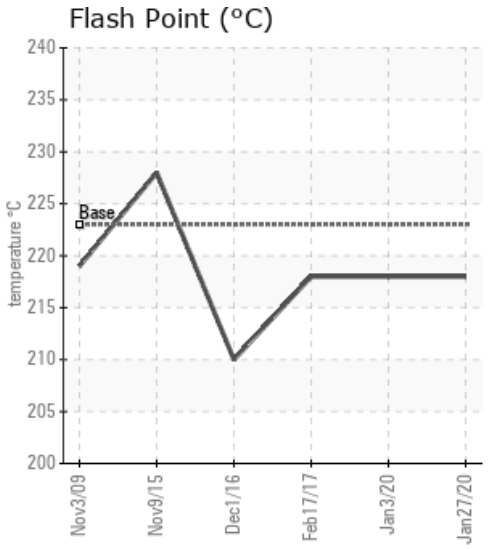
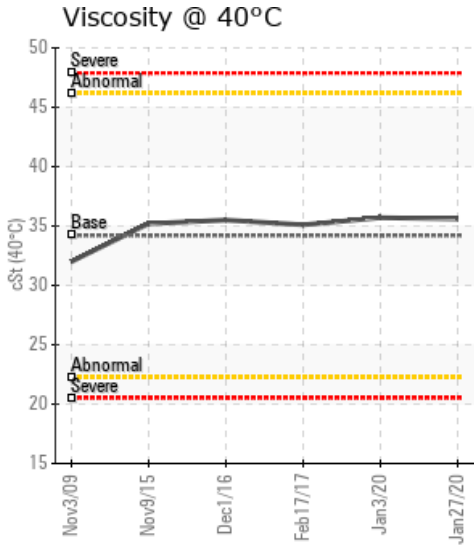
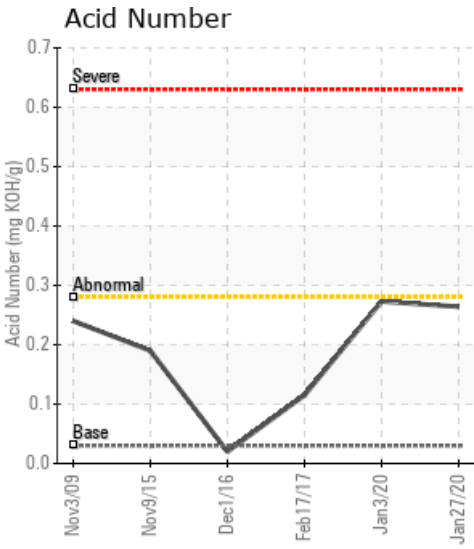
AHE-200

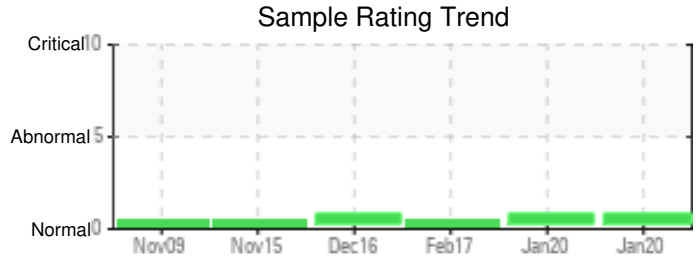
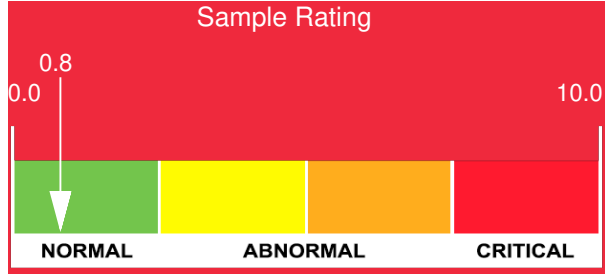
Customer: PTRHTF10100	System Information	Sample Information
PELLETROX INC. 2606 N. NEWARK STREET PORTLAND, OR 97217 USA Attn: WAYNE TRUSSEL Tel: (503)279-2625 E-Mail: wayne@bluelinetrans.com	System Volume: 700 gal Bulk Operating Temp: 500F / 260C Heating Source: Blanket: Fluid: PETRO CANADA PETRO-THERM Make: AMERICAN HEATING CO	Lab No: 02344621 Analyst: Ron LeBlanc Sample Date: 01/27/20 Received Date: 03/19/20 Completed: 03/23/20 Ron LeBlanc Ronald.LeBlancSr@petrocanadalsp.com

Recommendation: (GCD) 10% Distillation Point is marginally high. Sample is normal except 10% Distillation Point. Take a sample in 3 months. Purge oil from sample point before filling sample container.

Comments: (GCD) 10% Distillation Point is marginally high.

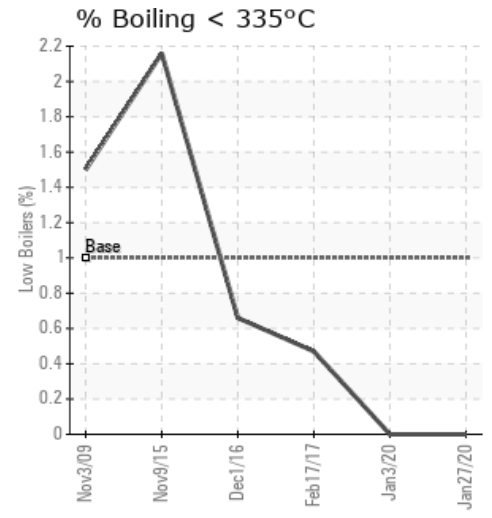
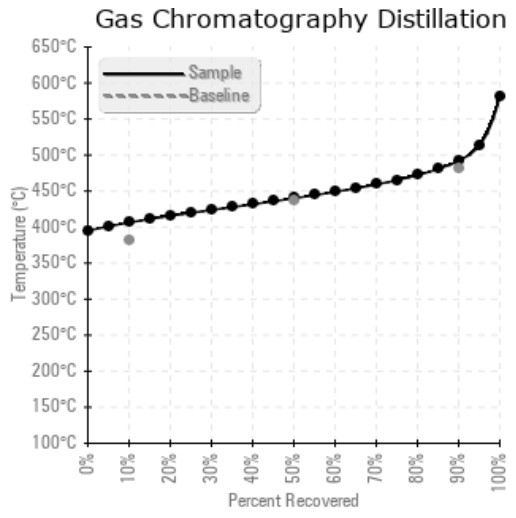
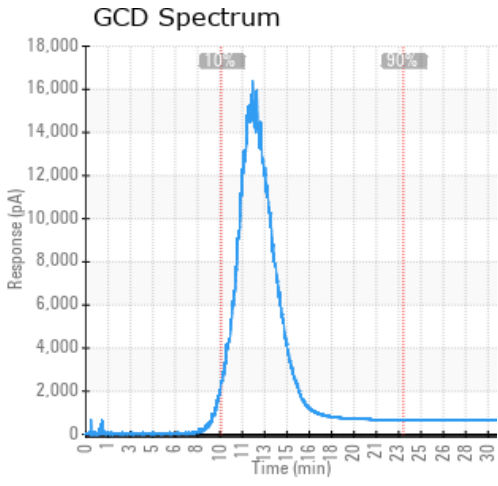
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
01/27/20	03/19/20	48m	EXPANSION TANK	424 / 218	60.8	35.6	0.264	0.176	764 / 406	824 / 440	918 / 492	0.00
01/03/20	03/19/20	48m	TOP OF PUMP	424 / 218	56.2	35.7	0.273	0.125	760 / 405	822 / 439	917 / 492	0.00
02/17/17	03/15/17	10m	TOP OF PMP AFT FLTR	424 / 218	65.8	35.1	0.115	0.063	717 / 380	808 / 431	913 / 489	0.47
12/01/16	03/15/17	8m	TOP OF PUMP	410 / 210	9.1	35.5	0.02	0.037	720 / 382	812 / 434	921 / 494	0.66
11/09/15	11/25/15	8m	AT OUTLETS ELBOW	442 / 228	25.1	35.2	0.19	0.239	686 / 364	782 / 417	870 / 466	2.16
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
01/27/20	10	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
01/03/20	6	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/17/17	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0
12/01/16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/09/15	7	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
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	
01/03/20	(GCD) 10% Distillation Point is marginally high. The sample is normal except the 10% Distillation Point. Resample in 3 months and be sure to purge oil from sampling point before filling sample container. (GCD) 10% Distillation Point is marginally high.
02/17/17	Sample appears normal.
12/01/16	Sample again in 3 months. (GCD) 90% Distillation Point is marginally high.
11/09/15	Sample looks much better than previous sample. Water dropped from 54 to 25.1 ppm. TAN has dropped significantly. Si dropped from 4.0 to .3. Sample again in 3 months.

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