

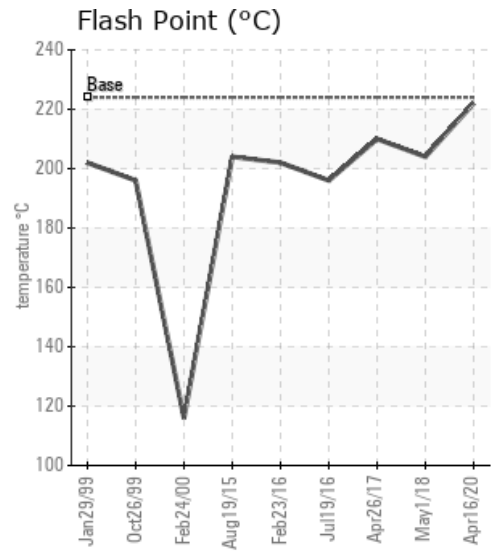
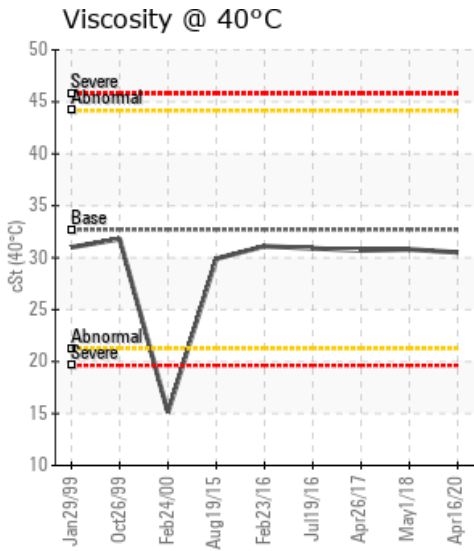
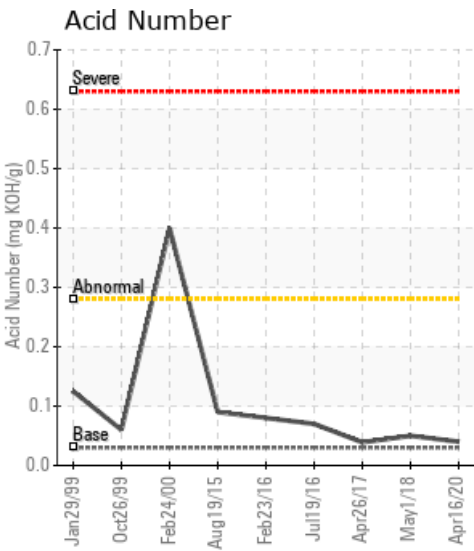
[DREW @ CELANESE] 5R HOT OIL FURNACE

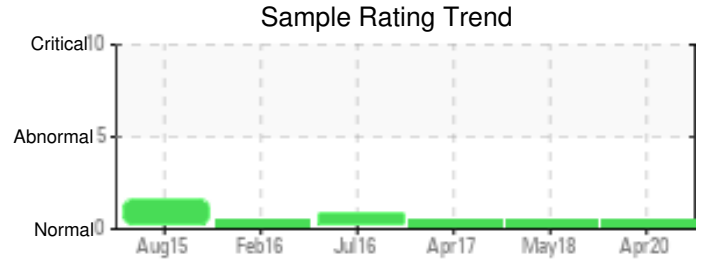
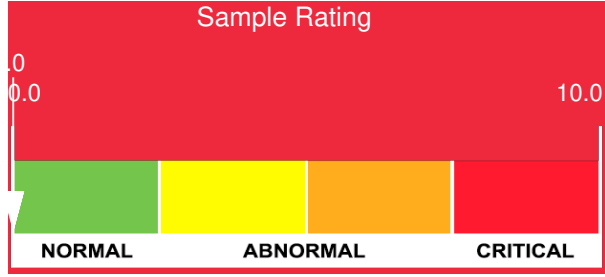
Customer: PTRHTF20087	System Information	Sample Information
Celanese Eva Performance Poly 4405-101 AVE. P.O. 428 EDMONTON, AB T5J 2K1 Canada Attn: Greg Hein Tel: E-Mail: greg.hein@celanese.com	System Volume: 0 ltr Bulk Operating Temp: Not Specified Heating Source: Blanket: Fluid: PETRO CANADA CALFLO AF Make: HEAT	Lab No: 02350980 Analyst: Yutong Gao Sample Date: 04/16/20 Received Date: 04/28/20 Completed: 04/30/20 Yutong Gao yutong.gao@petrocanadalsp.com

Recommendation: The current fluid has normal viscosity, flash point and distillation points. The water contamination is minimum. Solid content and TAN number are all very low. Please keep on running the fluid and take one sample in 12 months to monitor the conditions.

Comments:

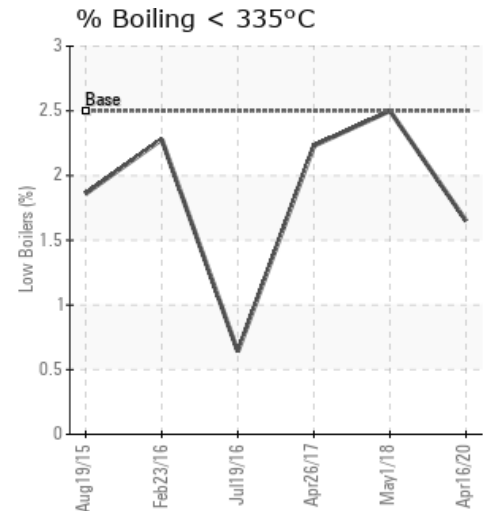
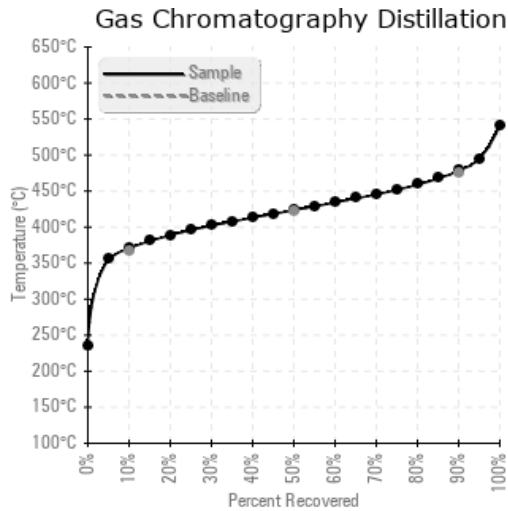
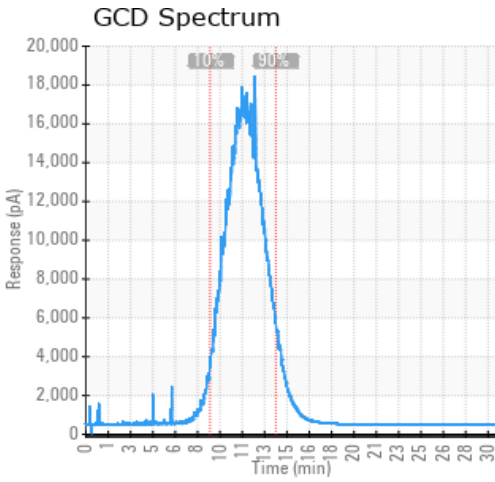
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
04/16/20	04/28/20	0h	FILTER POT	432 / 222	2.1	30.5	0.04	0.083	699 / 371	794 / 424	893 / 478	1.65
05/01/18	05/03/18	0h		399 / 204	8.3	30.8	0.05	0.186	687 / 364	794 / 423	893 / 479	2.50
04/26/17	04/27/17	0h	FILTER POT DRAIN	410 / 210	2.0	30.7	0.039	0.260	690 / 365	794 / 424	898 / 481	2.23
07/19/16	07/21/16	0h	DRAIN	385 / 196	19.4	30.9	0.07	0.093	694 / 368	795 / 424	928 / 498	0.64
02/23/16	02/24/16	0h	FILTER DRAIN	396 / 202	8.7	31.1	0.08	0.110	683 / 361	782 / 417	887 / 475	2.28
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
04/16/20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0
05/01/18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0
04/26/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	0
07/19/16	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	22	0
02/23/16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	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

05/01/18	Results are normal.
04/26/17	Results are normal. Re sample at the next sample interval and continue to monitor.
07/19/16	Flash Point reduction is typically associated with thermal degradation of the heat transfer oil. Resample at the next interval and continue to monitor the system. COC Flash Point is marginally low.
02/23/16	Results are normal. Resample at the next PM period and continue to monitor the system.

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