

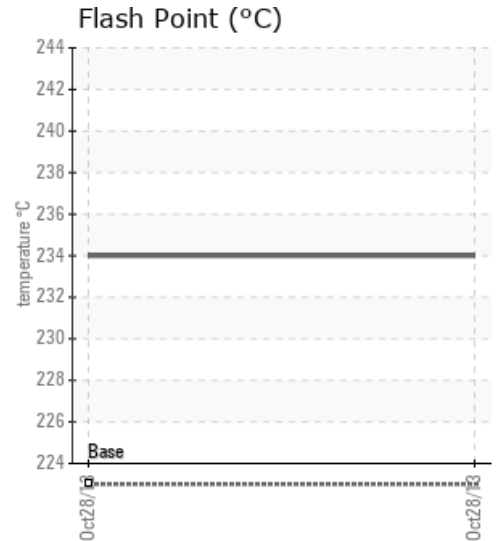
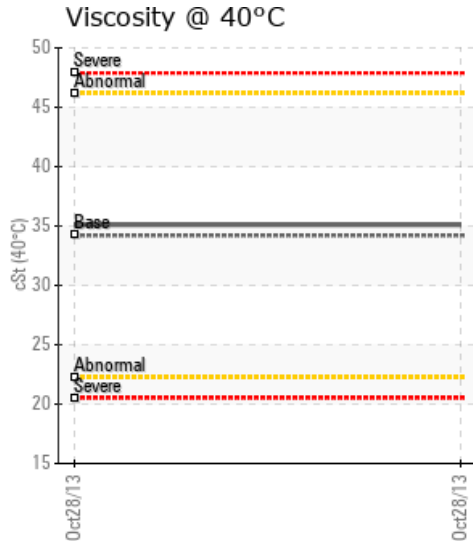
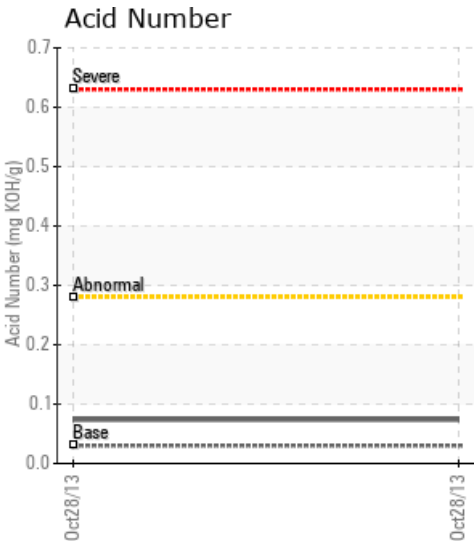
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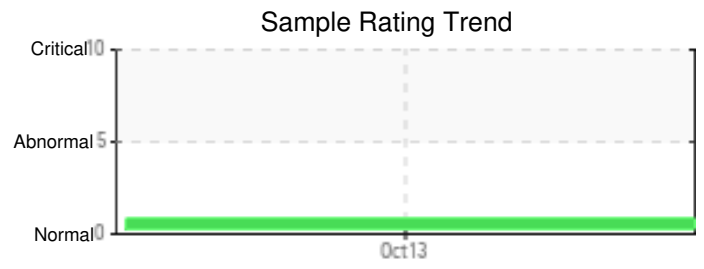
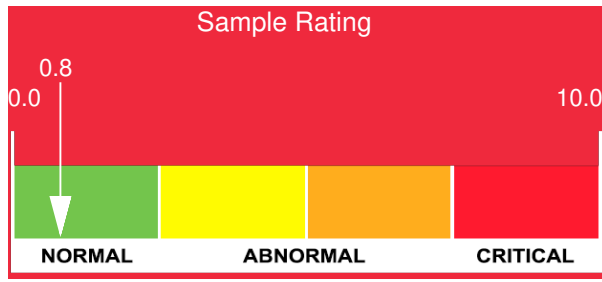
Customer: PTRHTF10140	System Information	Sample Information
PABCO ROOFING PRODUCTS 1718 THORNE RD TACOMA, WA 98421-3207 USA Attn: Andrew Williams Tel: (253)377-0597 E-Mail: andy.williams@paccoast.com	System Volume: 0 gal Bulk Operating Temp: Not Specified Heating Source: Blanket: Fluid: PETRO CANADA PETRO-THERM Make:	Lab No: 01877670 Analyst: Gaston Arseneault Sample Date: 10/28/13 Received Date: 11/13/13 Completed: 11/19/13

Recommendation: We can confirm the oil condition is great. No action needed at this time. The discoloration is normal in a new system that has not been flushed because of welding fines present, left over from rust preventative or machining fluids used to make or store the piping, contamination from instillation, etc. We suggest to re-sample every year to monitor the fluid condition.

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	%
10/28/13	11/13/13	3w	BY HEATER COIL	453 / 234	16.6	35.1	0.074	0.130	719 / 382	808 / 431	909 / 487	0.94
Baseline Data				433 / 223		34.2	0.03		707 / 375	799 / 426	887 / 475	2.6

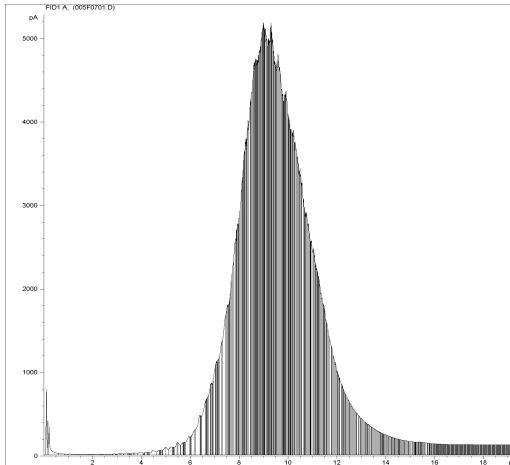




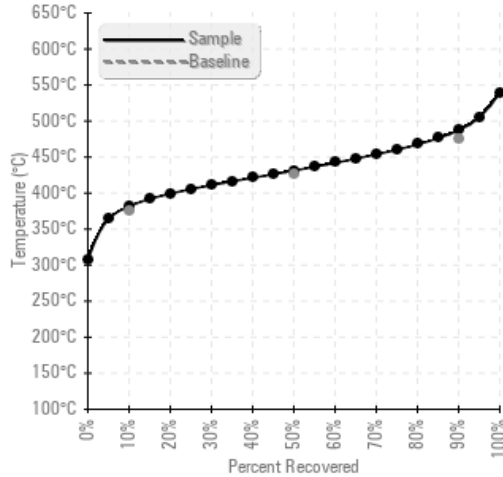
Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
10/28/13	1	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0
Baseline Data			0	0						0			0	0					0				0	

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

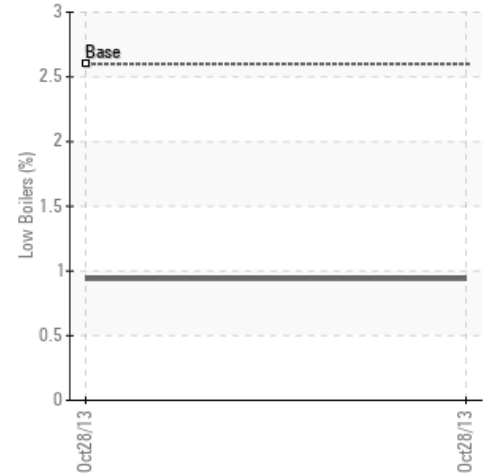
GCD Spectrum



Gas Chromatography Distillation



% Boiling < 335°C



Historical Comments

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