

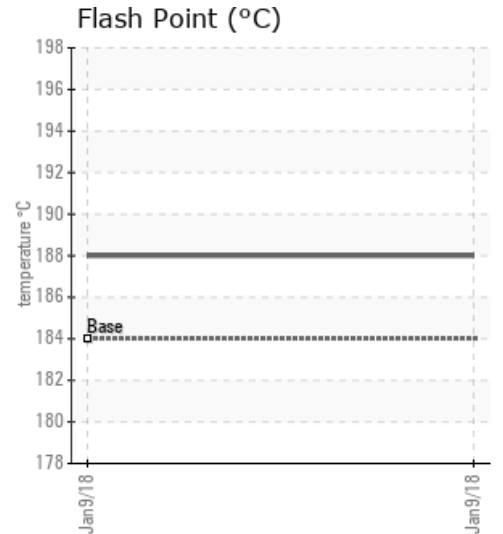
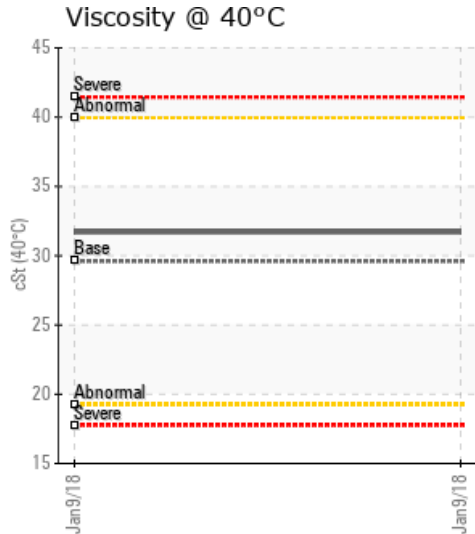
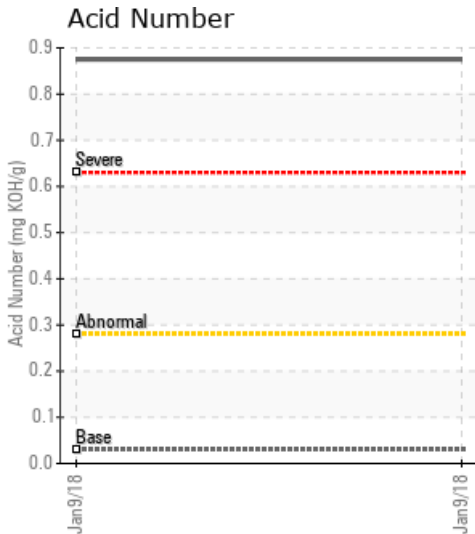
0793-13 EXTRUDER HOT OIL

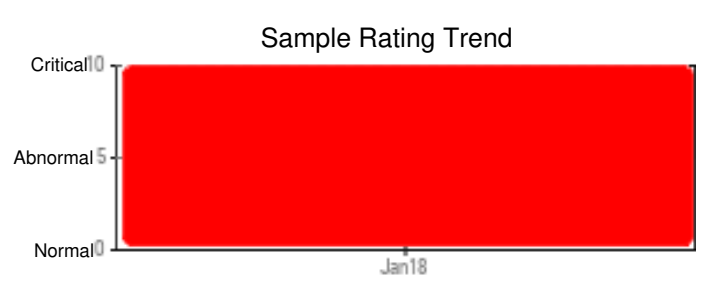
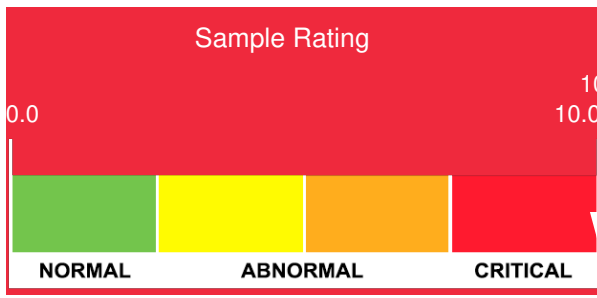
Customer: PTRHTF10191	System Information	Sample Information
Southwire Co. – SCBWP 3 Southwire Drive Carrollton, GA 30317 USA Attn: Bill Rayfield Tel: (770)832-4741 E-Mail: bill.rayfield@southwire.com	System Volume: 165 gal Bulk Operating Temp: 350F / 177C Heating Source: Blanket: Fluid: EASTMAN CHEMICAL THERMINOL 66 Make:	Lab No: 02193412 Analyst: Manny Garcia Sample Date: 01/09/18 Received Date: 01/18/18 Completed: 01/25/18

Recommendation: This system should be drained, flushed and re-fill with Petro-Canada Calflo AF or Calflo LT. The system needs to be inspected to make sure there is no evidence of any carbon build-up on the tank walls/lines. We recommend a Cleaning if this material cannot be removed manually with Petro Canada Cleaning Fluid

Comments: The Acid Number is very close to the condemning limit of 1.0 at .875 and the oil proves to be oxidized. Oxidation will increase the oils viscosity and make the fluid `sludgy` as in the fact that the Pentane insolubles are unsatisfactory at 1.58 and flagged by the lab. These are `solids` found in this sample. Zinc was found in the sample and that may be part of the plant's process or possibly a hydraulic oil that may have been topped off incorrectly. Pentane Insolubles levels are severely high. Acid Number (AN) is severely high. (GCD) 90% Distillation Point is severely high. Zinc ppm levels are severely high. (GCD) % < 335°C is abnormally high.

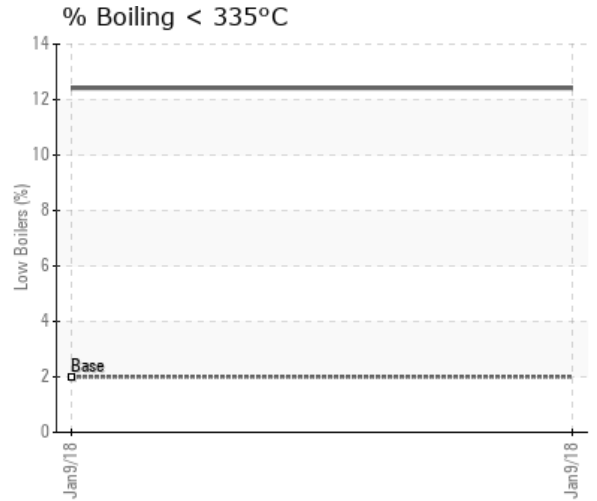
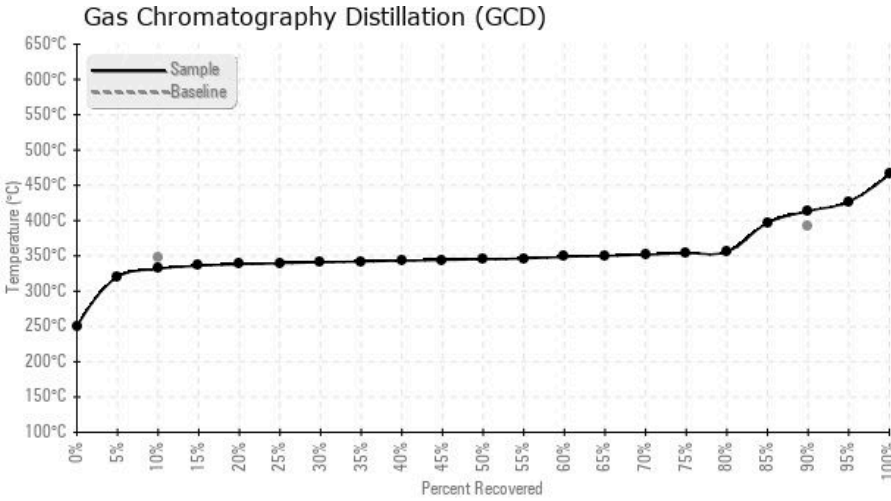
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
01/09/18	01/18/18	4y		370 / 188	63.6	31.7	0.875	1.58	629 / 332	653 / 345	776 / 414	12.42
Baseline Data				363 / 184		29.6	0.03		658 / 348		738 / 392	2.00





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
01/09/18	33	0	0	0	1	1	0	0	0	0	1	4	0	0	0	0	0	0	0	0	1	0	0	134
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

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