

WANSON EPC 2500 ES

Customer: PTRHTF40020
 LE DUC FINE FOOD BV
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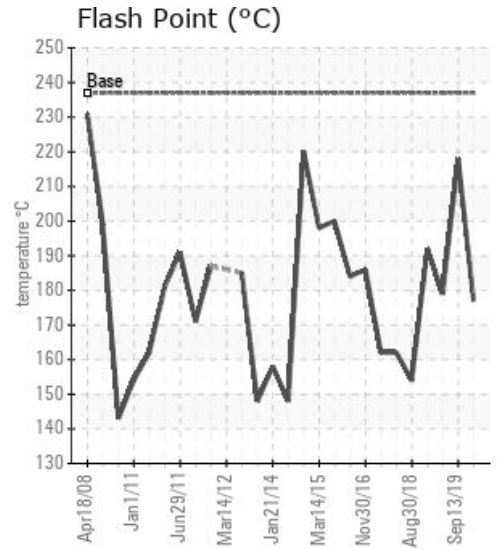
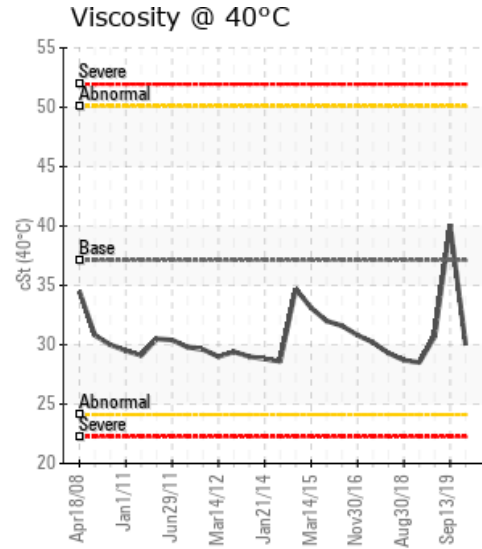
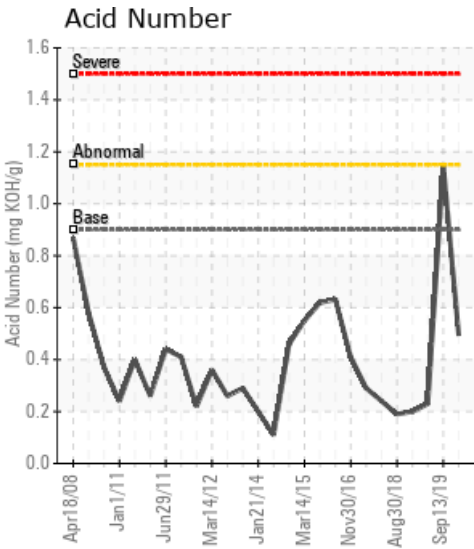
System Information
 System Volume: 1500 ltr
 Bulk Operating Temp: 265F / 129C
 Heating Source:
 Blanket:
 Fluid: PETRO CANADA PURITY FG HEAT TRANSFER FLUID
 Make: WANSON

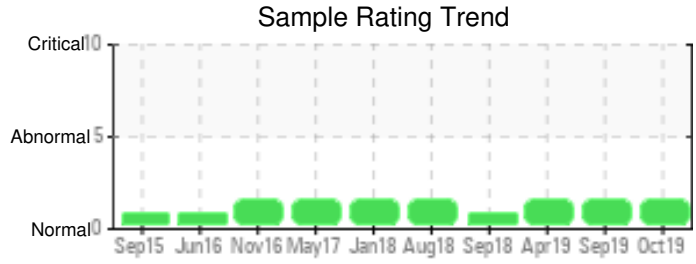
Sample Information
 Lab No: 02328630
 Analyst: Philip Riley
 Sample Date: 10/12/19
 Received Date: 12/23/19
 Completed: 01/12/20

Recommendation: Going through the history of this sample it raises some concerns. In this current sample there has been a loss in viscosity of 10cSt from previous, and a significant drop in flash point to a level that is severely low. The curve shows a little evidence of cracking, but levels of low weight hydrocarbons look fairly low. Some venting, if it can be done safely, may recover the flash point. I would attempt safe venting and re-sample. If it cannot be done a confirmation or another sample would be recommended as the step downwards in viscosity and flash point shows a worrying trend

Comments: COC Flash Point is severely low.

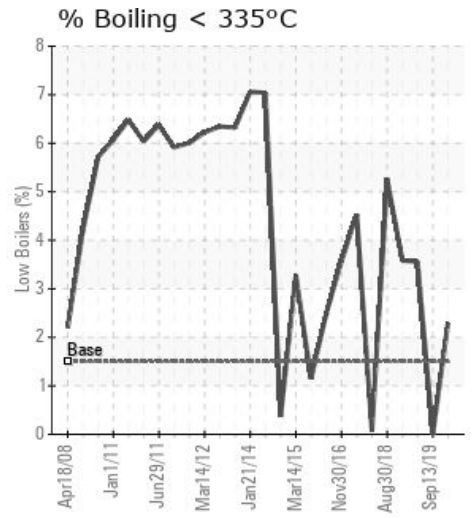
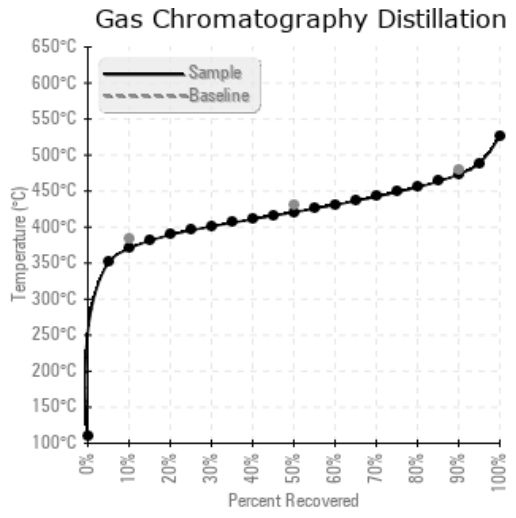
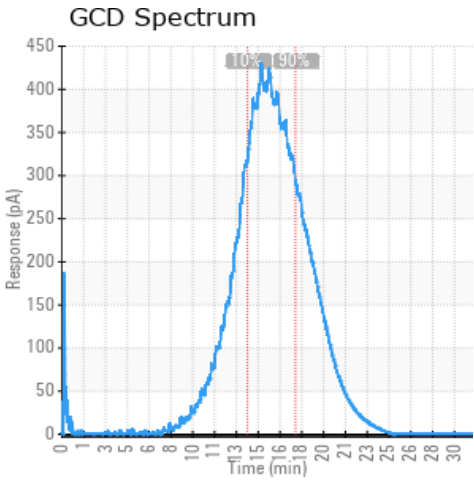
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
10/12/19	12/23/19	5y		351 / 177	40.4	30.0	0.494	0.304	698 / 370	789 / 421	884 / 473	2.29
09/13/19	09/19/19	5y		424 / 218	33.5	40.1	1.15	0.960	729 / 387	812 / 433	888 / 476	0.00
04/16/19	04/24/19	0y		354 / 179	29.0	30.7	0.23	0.192	699 / 370	799 / 426	893 / 479	3.56
09/28/18	10/04/18	0y		378 / 192	23.8	28.5	0.20	0.236	699 / 370	796 / 425	889 / 476	3.58
08/30/18	09/04/18	4y		309 / 154	24.5	28.7	0.19	0.115	684 / 362	798 / 426	898 / 481	5.26
Baseline Data				459 / 237		37.12	0.90		721 / 383	807 / 431	892 / 478	1.5





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
10/12/19	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	0
09/13/19	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	3
04/16/19	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	0
09/28/18	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
08/30/18	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0
Baseline Data			0	0						0			0	0					0				230	

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



Historical Comments	
09/13/19	Was this an oil change? All parameters around Flash Point and viscosity seem to have recovered to normal levels, but the insoluble are very high. Try some filtration to remove insoluble matter and check at normal oil sample interval. Pentane Insolubles levels are severely high.
04/16/19	COC Flash Point trending downwards, and must show caution. If it can be recovered safely through any form of venting (although no great volume of light molecules look to be present) it would be worth doing to potentially extend the life of the fluid. Iron ppm levels are noted. COC Flash Point is abnormally low.
09/28/18	Looks to have been changed from previous sample. COC Flash Point already low and if safe to do so recommend venting system if possible to remove light molecules that have potentially brought flash point down. All other parameters within allowable limits. COC Flash Point is abnormally low.
08/30/18	COC Flash Point is very low indeed. Viscosity is trending slightly downwards also. Recommend the fluid is changed. COC Flash Point is severely low.

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