

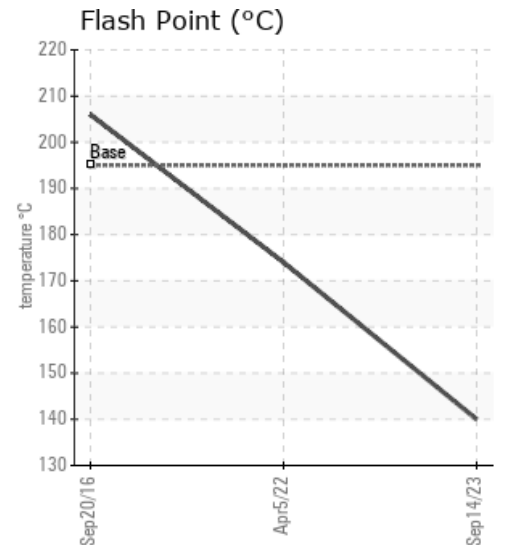
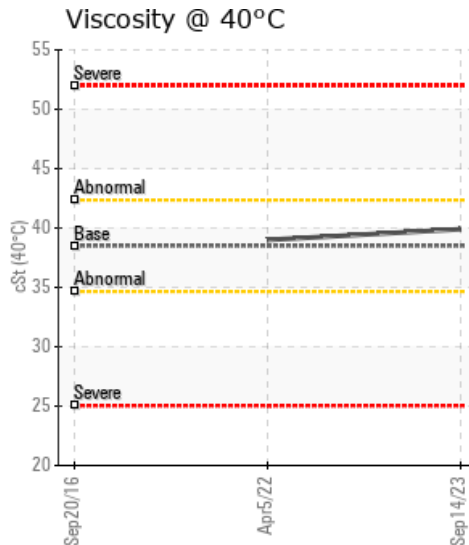
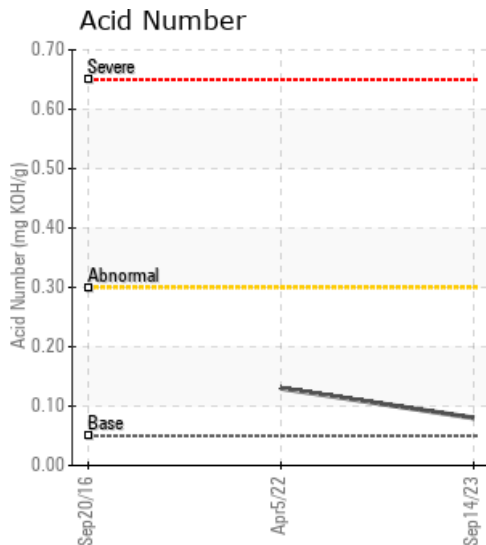
SHELL HEAT TRANSFER OIL S2

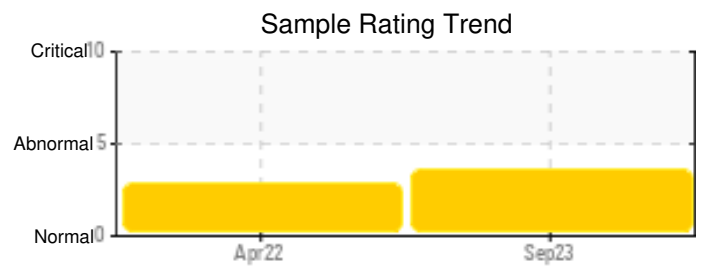
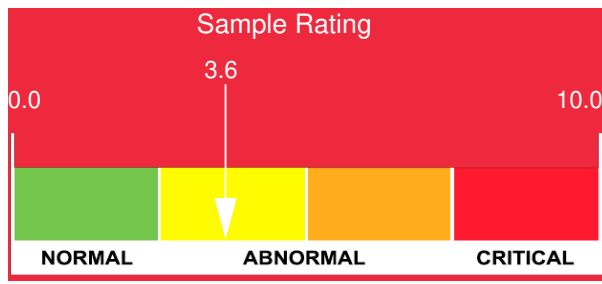
Customer: PTRHTF30099	System Information	Sample Information
Canadian Asphalt 400 EASTPORT BLVD HAMILTON, ON L8E 7S4 CA Attn: PETER HOORN Tel: (905)549-4561 E-Mail: PETER.HOORN@BITUMAR.COM	System Volume: 20000 gal Bulk Operating Temp: 460F / 238C Heating Source: Blanket: Fluid: SHELL HEAT TRANSFER OIL S2 Make:	Lab No: 02582999 Analyst: Bill Quesnel CLS,OMA II,MLA-III,LLA-I Sample Date: 09/14/23 Received Date: 09/15/23 Completed: 09/18/23 Bill Quesnel CLS,OMA II,MLA-III,LLA-I

Recommendation: We recommend that you vent the expansion tank to remove low boilers which assists in restoring the flash point of the fluid. We recommend an early resample to monitor this condition.

Comments: (GCD) 90% Distillation Point is severely high. COC Flash Point is abnormally low. (GCD) 50% Distillation Point is marginally high.

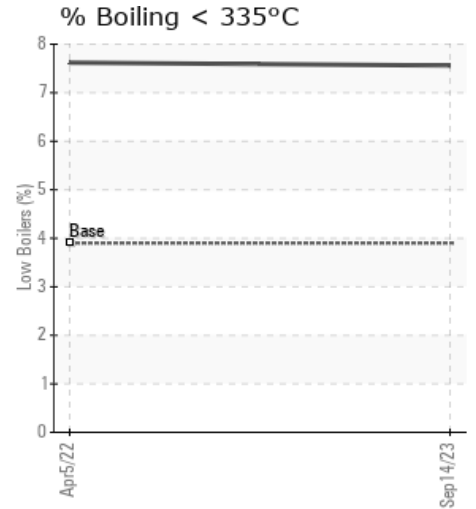
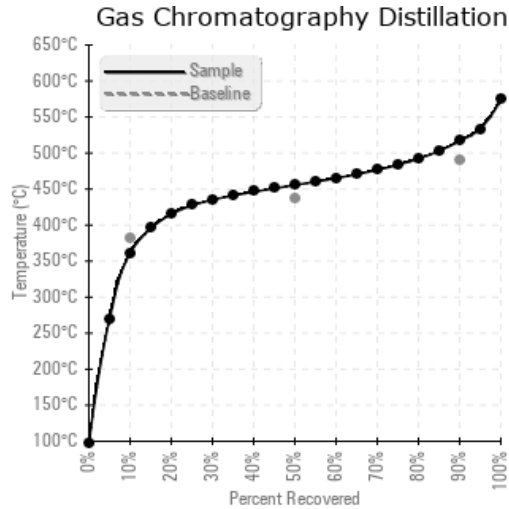
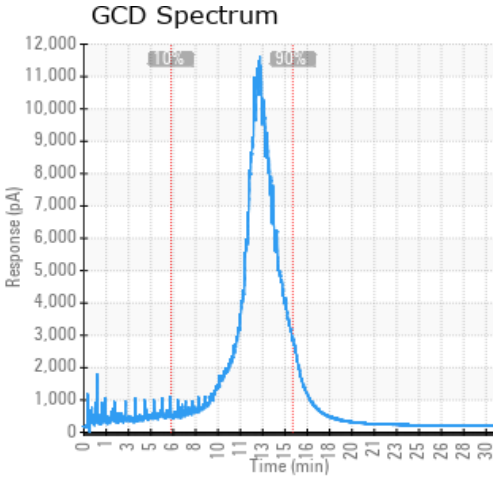
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
09/14/23	09/15/23	0.0y		284 / 140	29.0	39.9	0.08	0.044	682 / 361	852 / 456	962 / 517	7.56
04/05/22	04/07/22	10.0y	downstream blower hs	345 / 174	21.1	39.0	0.13	0.009	681 / 360	852 / 456	960 / 516	7.62
09/20/16	09/21/16	0.0y		403 / 206								
Baseline Data				383 / 195		38.5	0.05		718 / 381	819 / 437	914 / 490	3.9





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	
09/14/23	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04/05/22	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09/20/16																									
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	
04/05/22	(GCD) 90% Distillation Point is marginally high. (GCD) 50% Distillation Point is marginally high.
09/20/16	This is a baseline read-out on the submitted sample. {not applicable} {not applicable} Flash Point = 125°C.