



CHICAGO OGDEN PLANT

Customer: PTRHTF30109	System Information	Sample Information
RELIABLE MATERIALS LLC 5500 S PULASKI CHICAGO, IL 60629 USA Attn: Bob Madden Tel: (630)774-4120 E-Mail: rmadden@biganepaving.com	System Volume: 600 gal Bulk Operating Temp: 325F / 163C Heating Source: Blanket: Fluid: PARATHERM HE Make:	Lab No: 02242965 Analyst: Yvette Trzcinski Sample Date: 09/24/18 Received Date: 10/03/18 Completed: 10/10/18 To discuss this report contact Yvette Trzcinski at (262)933-0718

Recommendation: The sample shows signs of thermal cracking - the GCD distillation points at 10% and 90% are lower than for new oil the fluid is thermally degrading creating lighter/shorter hydrocarbons lowering viscosity which is 10% lighter than new fluid and can lead to heavy carbonaceous deposits that can foul the system leading to system inefficiencies.

Comments: (GCD) 90% Distillation Point is severely low. Calcium ppm levels are severely 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	%
09/24/18	10/03/18	4y		432 / 222	42.3	37.5	0.09	0.317	687 / 364	792 / 422	898 / 481	0.00
Baseline Data				410 / 210		45	0.004		725 / 385		945 / 507	0.74



