



SHEPARD (CALGARY)

Customer: PTRHTF20056	System Information	Sample Information
COLASPHALT 26222 TOWNSHIP ROAD 530A ACHESON, AB T7X 5A7 Canada Attn: Luis Salinas Tel: (780)699-2447 E-Mail: luis.salinas@colasphalt.ca	System Volume: 10000 ltr Bulk Operating Temp: 400F / 204C Heating Source: Blanket: Fluid: PETRO CANADA PETRO-THERM Make: HEATER	Lab No: 01932999 Analyst: Chris Armstrong Sample Date: 07/03/14 Received Date: 07/24/14 Completed: 09/19/14 To discuss this report contact Chris Armstrong at (416)347-3739

Recommendation: We are seeing severe oxidation of this fluid which is going to lead to decreased efficiency of the heat transfer system. It appears as this system is being pushed very hard, contributing to the excess oxidation of the fluid. Please sample again in 4 months time and you will need to consider changing the fluid in the near future if the oxidation continues at this rate.

Comments: Acid Number (AN) is severely high. (GCD) 50% Distillation Point is severely high. (GCD) 90% Distillation Point is severely high. (GCD) 10% Distillation Point is abnormally high. Visc @ 40°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	%
07/03/14	07/24/14	4y	INLET TO HEATER	468 / 242	65.5	113	1.35	0.328	769 / 409	906 / 486	1010 / 543	0.26
Baseline Data				433 / 223		34.2	0.03		720 / 382	817 / 436	900 / 482	1.00



