



14-23-58-26W5

Customer: PTRHTF20103	System Information	Sample Information
CNRL WEST PLANT P.O. BOX 6808 EDSON, AB T7E 1L5 Canada Attn: Rodney Marcichiw Tel: (780)517-3542 E-Mail: rodney.marcichiw@cnrl.com	System Volume: 10000 ltr Bulk Operating Temp: 365F / 185C Heating Source: Blanket: Fluid: PETRO CANADA PETRO-THERM Make:	Lab No: 02251744 Analyst: Peter Harteveld Sample Date: 11/08/18 Received Date: 11/15/18 Completed: 11/19/18

Recommendation: The Flash Point of the fluid is very low. This can be a safety hazard when the fluid comes into contact with air and a source of ignition. The viscosity and 90% GCD temperature are low. All of this combined points to ingress of a hydro-carbon process fluid. Please check for internal leaks and re-sample after the problem has been corrected.

Comments: COC Flash Point is severely low. (GCD) 90% Distillation Point is marginally 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	%
11/08/18	11/15/18	0y		165 / 74	19.6	26.2	0.014	0.045	694 / 368	787 / 420	877 / 469	1.53
Baseline Data				433 / 223		34.2	0.03		720 / 382	817 / 436	900 / 482	1.00



