

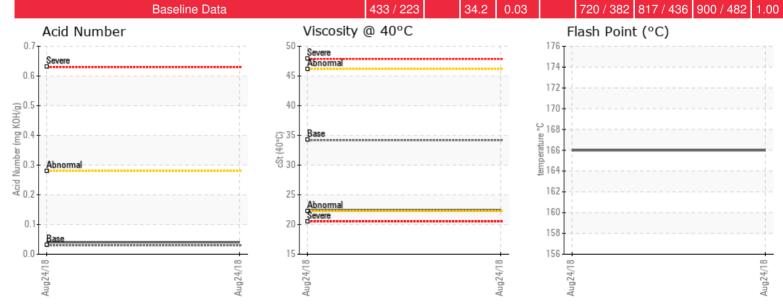
[PEYTO EXPLORATION 9-34-53-20] PLANT 1 STABALIZER

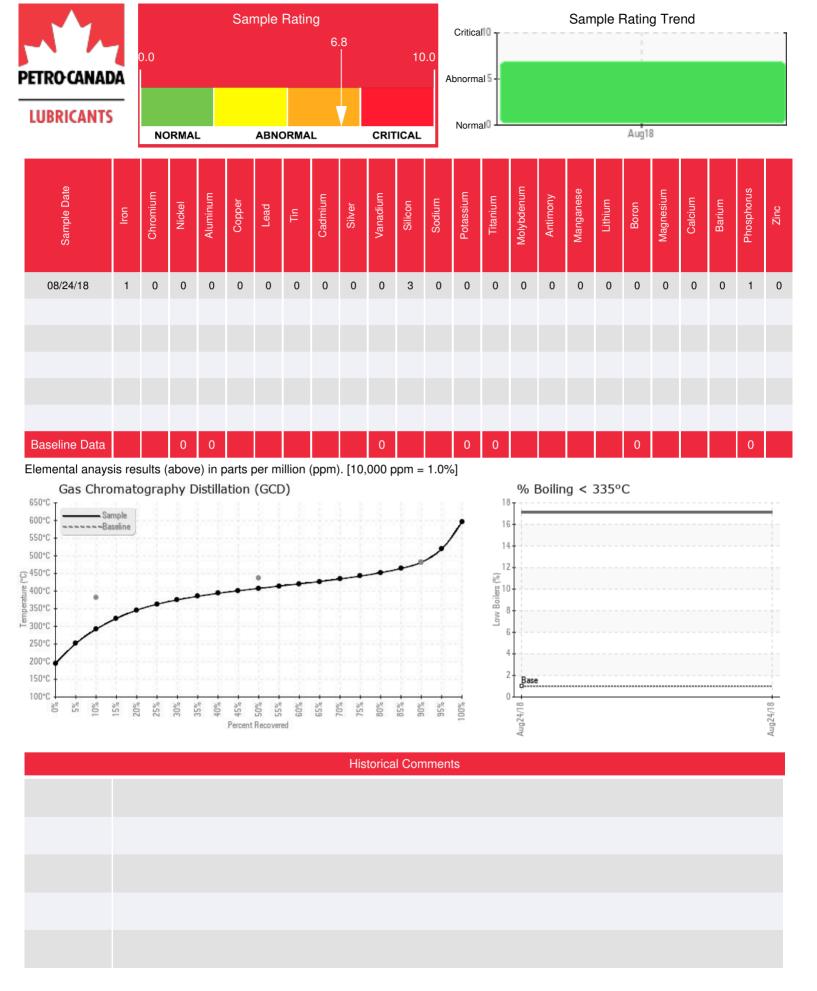
Customer: PTRHTF20124	System Information	Sample Information			
PEYTO EXPLORATION	System Volume: 5000 ltr	Lab No: 02236636			
11-17-55-21W5	Bulk Operating Temp: 392F / 200C	Analyst: Peter Harteveld			
BOX 7198	Heating Source:	Sample Date: 08/24/18			
EDSON, AB T7E 1V4 Canada	Blanket:	Received Date: 08/29/18			
Attn: Cory Pambrub	Fluid: PETRO CANADA PETRO-THERM	Completed: 09/03/18			
Tel: (780)712-0217	Make: ALCO	To discuss this report contact Peter			
E-Mail: cpambrun@peyto.com		Harteveld at (780)967-4234			

Recommendation: The combination of low viscosity, low Flash Point, low 10% GCD temperature and high low boiler vapor content (GCD%<335C.) indicates thermal degradation of the fluid. Part of the high low boiler vapor content could be ingress of blanket gas when fuel gas is used as the gas blanket, especially when the blanket gas pressure is too high (recommended is 2-3 psig) The fluid is suitable for further use but it is recommended to vent-off the low boiler vapors to atmosphere on a regular basis. This should be part of preventive maintenance. After venting twice per week for 3 months.(4 to 6 hours at a time), please re-sample.

Comments: (GCD) % < 335°C is severely high. (GCD) 10% Distillation Point is severely low. COC Flash Point is abnormally 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	%
08/24/18	08/29/18	Зу	BOTTOM DRAIN	331 / 166	19.7	22.4	0.040	0.051	557 / 292	766 / 408	898 / 481	17.11





Petro-Canada makes no representation or warranty of any kind, either express or implied, as to the accuracy or completeness of the analysis and assumes no responsibility and shall have no liability whatsoever with respect to such analysis, or a party's use of it. Petro-Canada is a division of HollyFrontier Corporation.

Report ID: [02236636] (Generated: 09/03/2018 16:49:36) - Page 2 - Copyright 2018 Wearcheck Inc. All Rights Reserved.