

[LSD: B-88-J-94-G-1] J1 HOT OIL SYSTEM

Customer: PTRHTF20209

NORTH RIVER MIDSTREAM CHARLIE LAKE OFFICE MILE 53 ALASKA HWY

FORT ST. JOHN, BC V1N 4H7 Canada

Attn: Lindsey Kessler Tel: (403)952-9999

E-Mail:

System Information

System Volume: 12000 ltr

Bulk Operating Temp: 401F / 205C

Heating Source:

Blanket:

Fluid: PETRO CANADA PETRO-THERM

Make: HEATECH

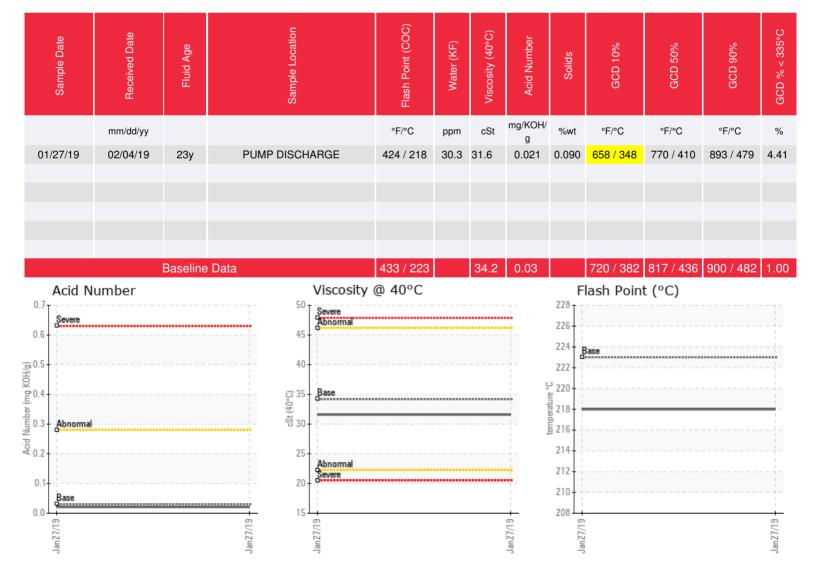
Sample Information

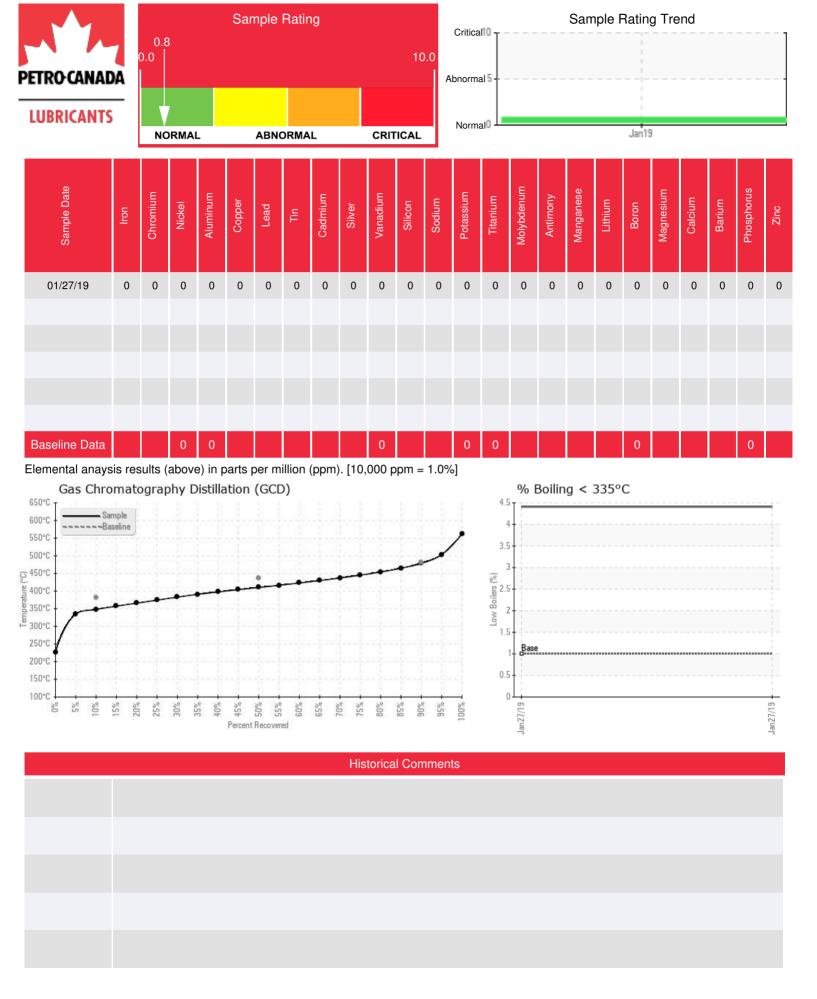
Lab No: 02265950 Analyst: Clinton Buhler Sample Date: 01/27/19 Received Date: 02/04/19

Completed: 03/04/19

Recommendation: Sample results indicate that the heat transfer fluid is suitable for continued service. Slightly lower distillation values, 4.45% boil-off and reduced fluid viscosity can be an indication of either thermal degradation or high blanket gas pressure. It is optimal to vent low boiling vapors from expansion tank. Please note that blanket gas needs to be turned off during venting to allow vapors to escape. Investigate if this can be done or if pumps require the blanket gas for positive suction head. Once venting has been performed, please re-sample in 6 months.

Comments: (GCD) 10% Distillation Point is marginally low.





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.