



[STORM RESOURCES / D-39-D/94-H-3] H-4030

Customer: PTRHTF20182	System Information	Sample Information
Storm Resources Ltd. PO Box 1420, Stn M Calgary, AB T2P 2L6 Canada Attn: Travis Cameron Tel: (250)263-1263 E-Mail: travisc@stormresourcesltd.com	System Volume: 14000 ltr Bulk Operating Temp: 518F / 270C Heating Source: Blanket: Fluid: PETRO CANADA PETRO-THERM Make: ALCO	Lab No: 02227360 Analyst: Clinton Buhler Sample Date: 05/06/18 Received Date: 07/10/18 Completed: 07/11/18 To discuss this report contact Clinton Buhler at 780-516-9920

Recommendation: sample results indicate that the heat transfer fluid is suitable for continued service. Please note Acid Number at 0.289. This can be an indication of oxidation. Please ensure blanket gas is operational. Iron at 11 ppm can be associated to Acid Number (possible corrosion). Silicon at 20 ppm; this can be from dirt/dust in the system. Please ensure system is sealed from outside contaminants and that fluid transfer devices and hoses are clean. % boil off <335C can be an indication of thermal degradation. As part of a sound maintenance program, periodic venting of low boiling vapors is beneficial. Re-sample in 6-12 months

Comments:

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	%
05/06/18	07/10/18	18m		432 / 222	159.7	35.8	0.289	0.210	718 / 381	810 / 432	907 / 486	1.33
Baseline Data				433 / 223		34.2	0.03		720 / 382	817 / 436	900 / 482	1.00



