

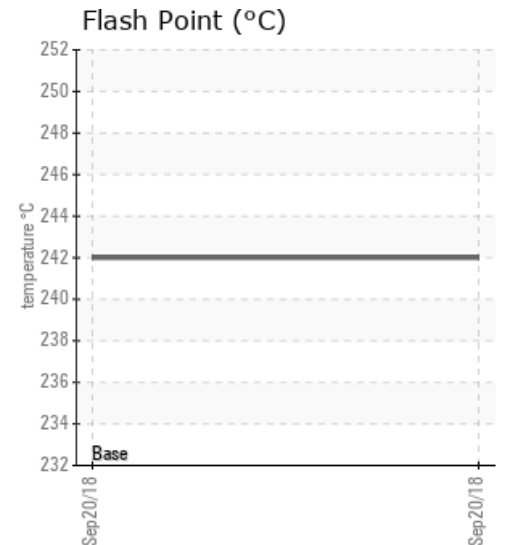
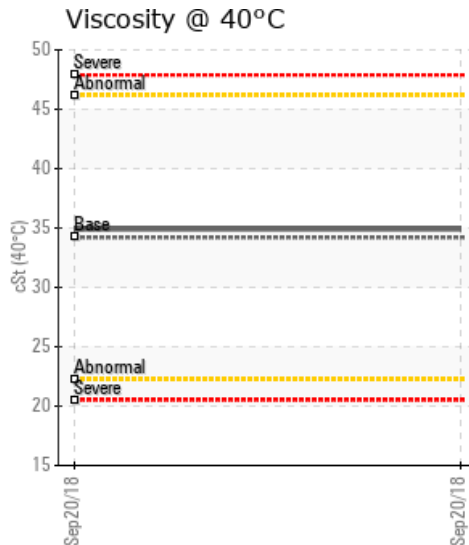
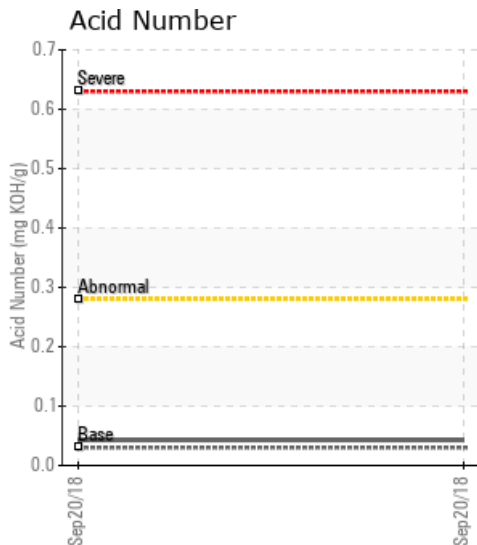
[CIRCULATING PUMP DISCHARGE LINE] 5-02-76-12W6M H941 A/B

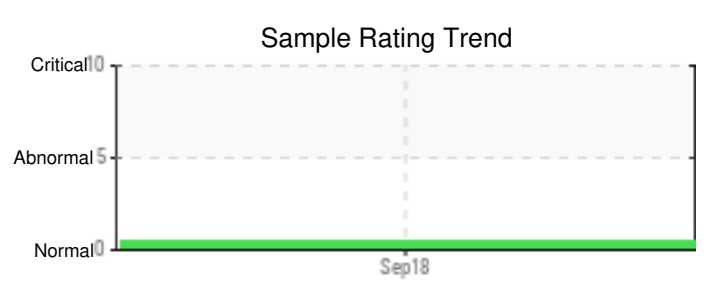
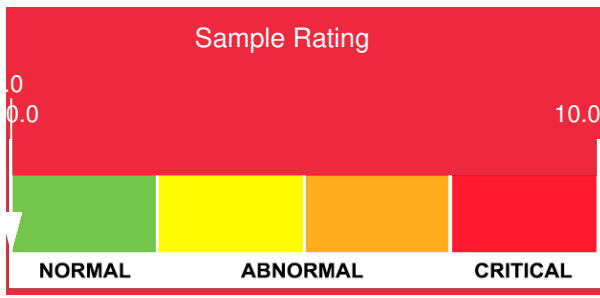
Customer: PTRHTF20204	System Information	Sample Information
ADVANTAGE OIL AND GAS 05-02-76-12W6M HYTHE, AB Canada Attn: Lorne Kingdon Tel: (780)552-3083 E-Mail: lkingdon@advantageog.com	System Volume: 110000 ltr Bulk Operating Temp: 410F / 210C Heating Source: Blanket: Fluid: PETRO CANADA PETRO-THERM Make: PETROTECH	Lab No: 02247774 Analyst: Clinton Buhler Sample Date: 09/20/18 Received Date: 10/26/18 Completed: 03/26/19

Recommendation: Sample results indicate that the heat transfer fluid is suitable for continued service. If total service time on fluid is 2 years, please re-sample in 12 months

Comments:

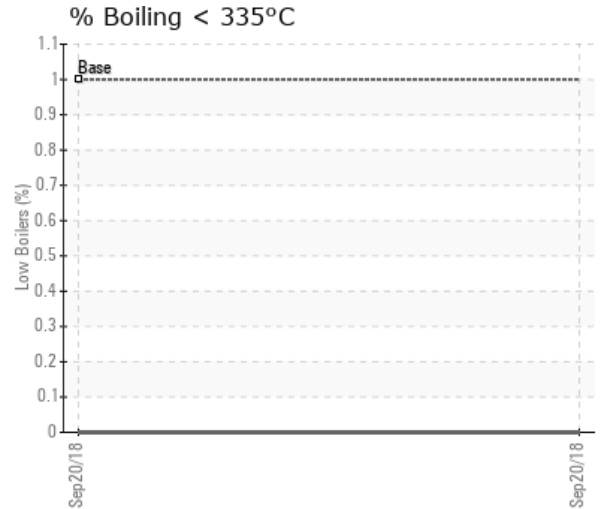
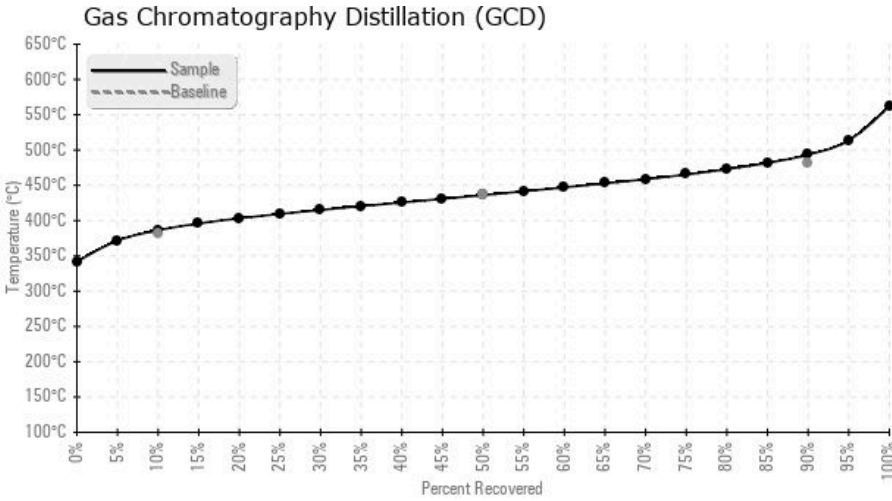
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
09/20/18	10/26/18	2y		468 / 242	88.8	34.9	0.043	0.048	727 / 386	817 / 436	920 / 493	0.00
Baseline Data				433 / 223		34.2	0.03		720 / 382	817 / 436	900 / 482	1.00





Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
09/20/18	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Baseline Data			0	0						0			0	0					0				0	

Elemental analysis results (above) in parts per million (ppm). [10,000 ppm = 1.0%]



Historical Comments

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