

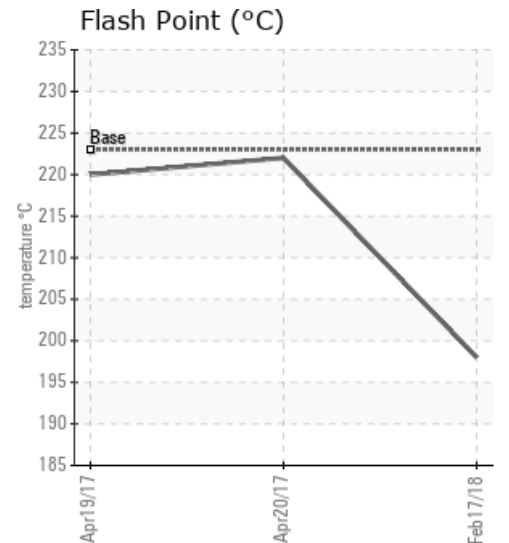
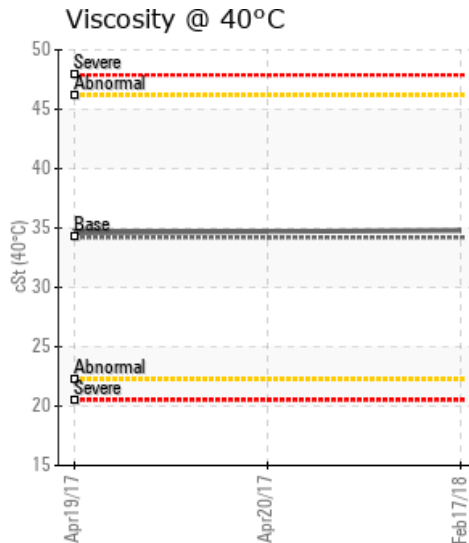
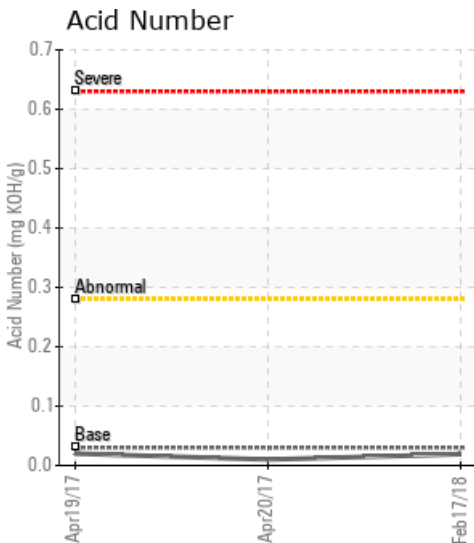
[LUKE BRADY / 16-08-4-3W2] HEAT MEDIUM

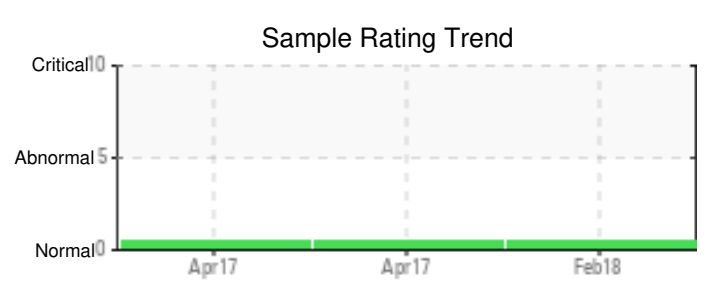
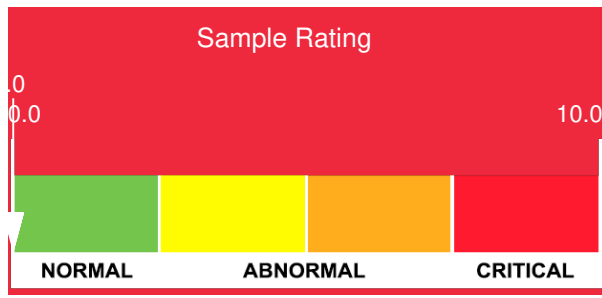
Customer: PTRHTF20185	System Information	Sample Information
STEEL REEF 16-08-04-03 W2 ALAMEDA, SK Canada Attn: Parker Cameron Tel: (306)575-6309 E-Mail: parker.cameron@steelreef.ca	System Volume: 35000 ltr Bulk Operating Temp: 414F / 212C Heating Source: Blanket: Fluid: PETRO CANADA PETRO-THERM Make: RUSHTON	Lab No: 02194229 Analyst: Kevin McDermott Sample Date: 02/17/18 Received Date: 01/23/18 Completed: 02/23/18 To discuss this report contact Kevin McDermott at (403)215-7052

Recommendation: Fluid condition remains excellent. Suggest submitting samples of used fluid annually to proactively monitor fluid condition. Sooner if fluid gets exposed to severe conditions.

Comments:

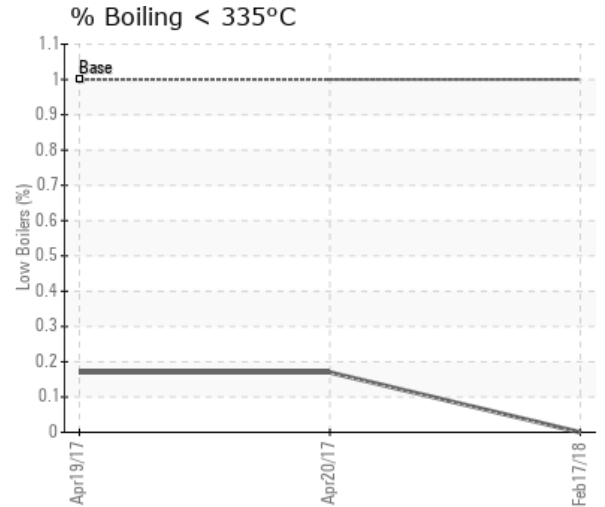
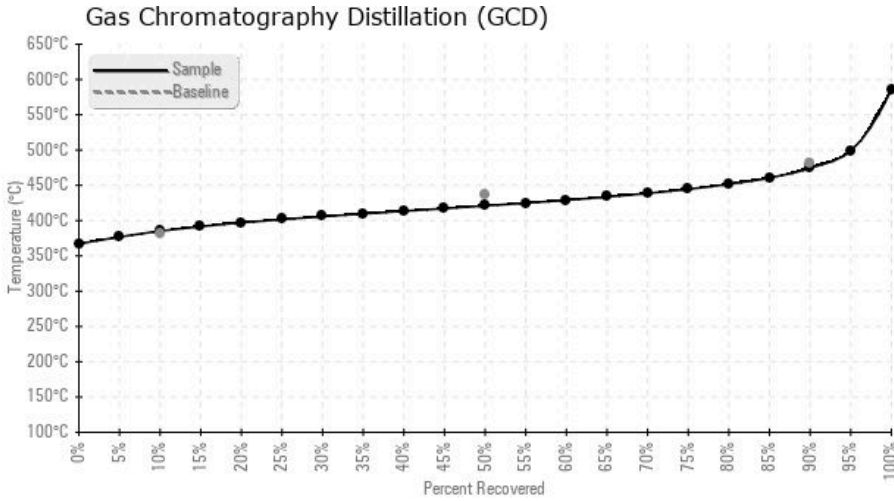
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
02/17/18	01/23/18	17m		388 / 198	0.00	34.8	0.019	0.036	725 / 385	790 / 421	886 / 474	0.00
04/20/17	04/25/17	8m	OUTLET OF HM FILTER	432 / 222	19.6	34.7	0.01	0.039	721 / 383	811 / 433	916 / 491	0.17
04/19/17	04/25/17	8m	INLET TO FILTER	428 / 220	88.4	34.6	0.02	0.048	720 / 382	810 / 432	916 / 491	0.17
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
02/17/18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/20/17	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/19/17	0	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	
04/20/17	Fluid is in very good condition. Suggest annual sampling to proactively monitor the fluid condition - sooner if the fluid gets exposed to severe conditions.
04/19/17	Fluid is in very good condition. Suggest annual sampling to proactively monitor the fluid condition - sooner if the fluid gets exposed to severe conditions.

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