

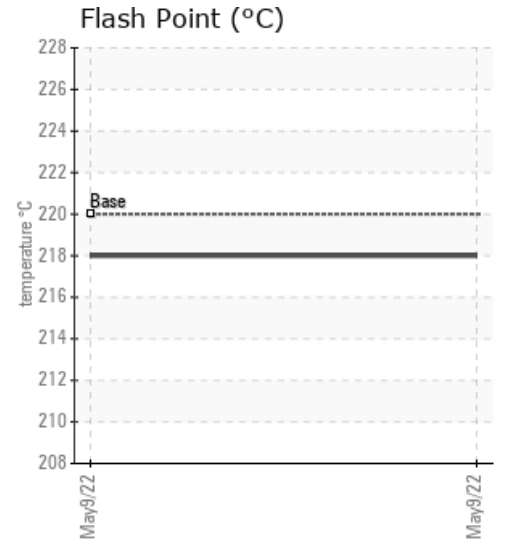
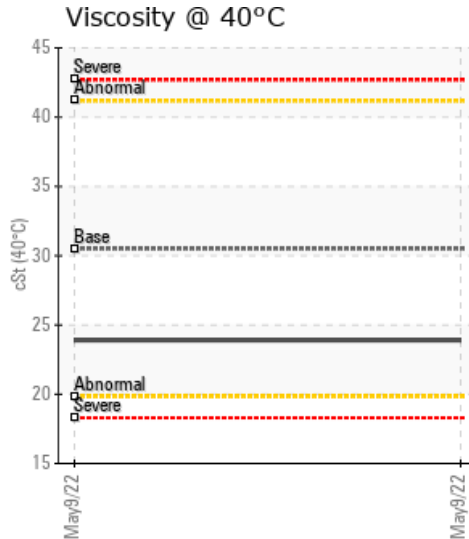
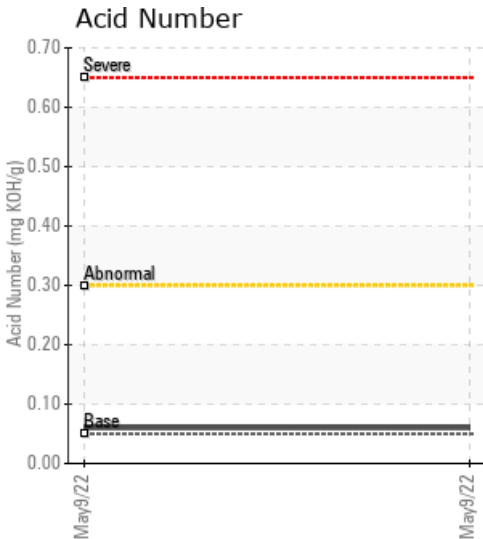
## HTF 5 & 6

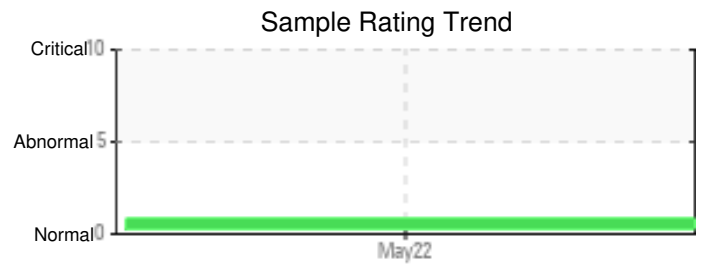
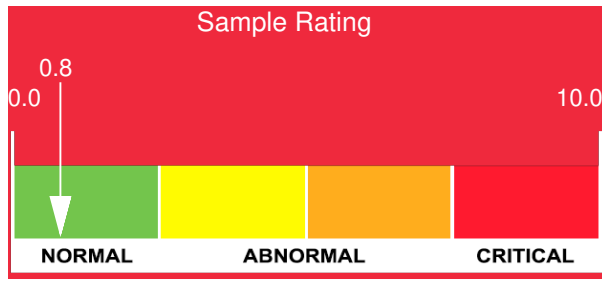
Customer: PTRHTF60033	System Information	Sample Information
NZAS - New Zealand Aluminium Smelte... Tiwai Point Invercargill, ZZ 9810 New Zealand Attn: Nat O'neil Tel: 032185587 E-Mail: nat.oneill@riotinto.com	System Volume: 24000 ltr Bulk Operating Temp: 482F / 250C Heating Source: Blanket: Fluid: CASTROL PERFECTO HT5 Make: WEISHAMPT	Lab No: 02490018 Analyst: Bill Quesnel CLS,OMA II,MLA-III,LLA-I Sample Date: 05/09/22 Received Date: 05/20/22 Completed: 06/03/22 Bill Quesnel CLS,OMA II,MLA-III,LLA-I

Recommendation: Fluid is suitable for continued use. Resample in one year. NOTE: COC Flash Pt test performed twice, 210°C and 218°C.

Comments: (GCD) 90% Distillation Point is abnormally high.

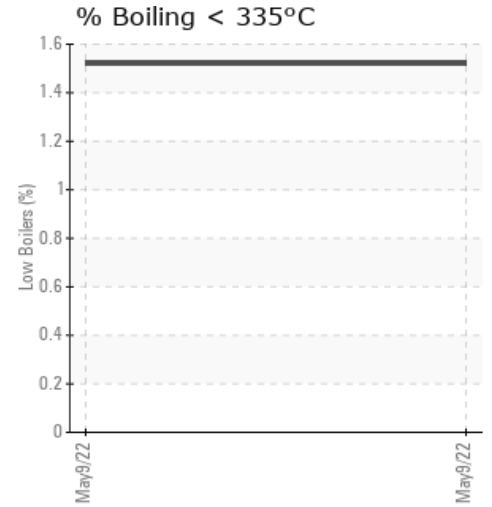
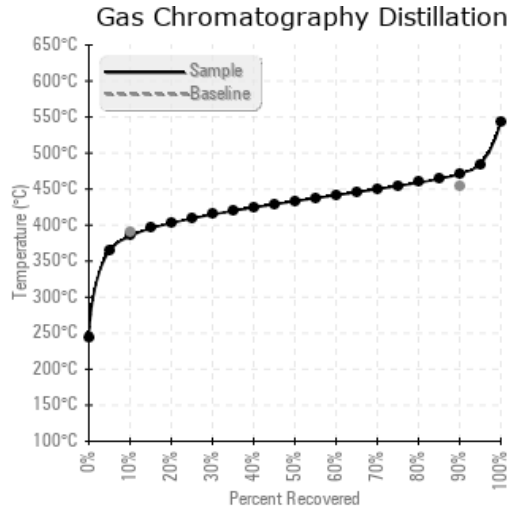
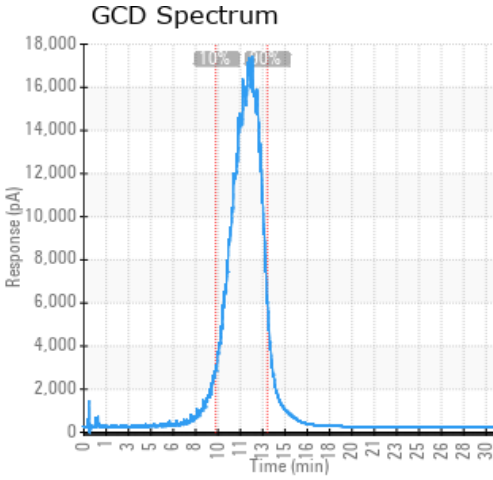
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
05/09/22	05/20/22	8.0y	V3610	424 / 218	8.1	23.9	0.06	0.041	724 / 385	812 / 433	880 / 471	1.52
Baseline Data				428 / 220		30.5	0.05		734 / 390		849 / 454	





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
05/09/22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Baseline Data</b>			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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