

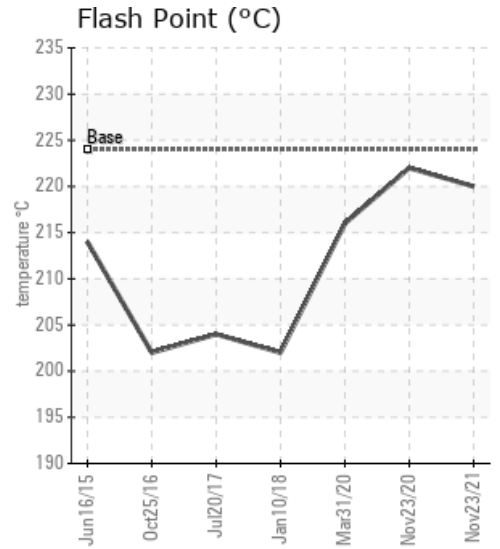
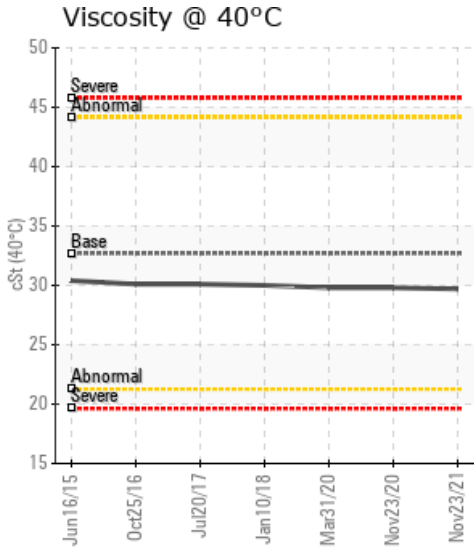
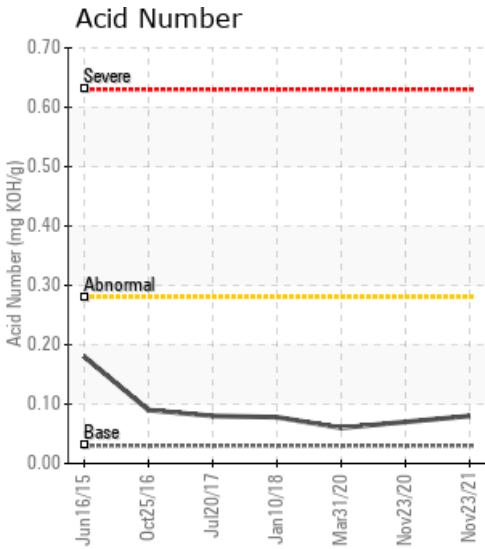
LINE 3

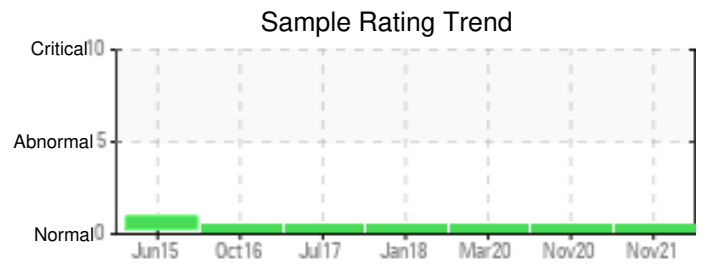
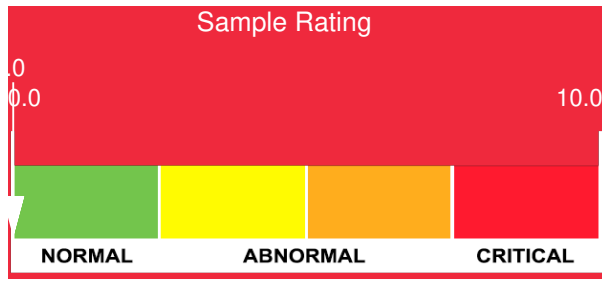
Customer: PTRHTF60002	System Information	Sample Information
BOYNE SMELTERS LTD-RIO TINTO HANDLEY DRIVE QUEENSLAND BOYNE ISLAND, QUE 4680 AUSTRALIA Attn: Heath Mitchell Tel:	System Volume: 1500 ltr Bulk Operating Temp: 419F / 215C Heating Source: Blanket: Fluid: PETRO CANADA CALFLO AF Make:	Lab No: 02460673 Analyst: Philip Riley Sample Date: 11/23/21 Received Date: 12/07/21 Completed: 12/13/21 Philip Riley philip.riley@hollyfrontier.com

Recommendation: Oil in good condition and fit for further use. Meets all expected parameters. Please resample at normal frequency

Comments:

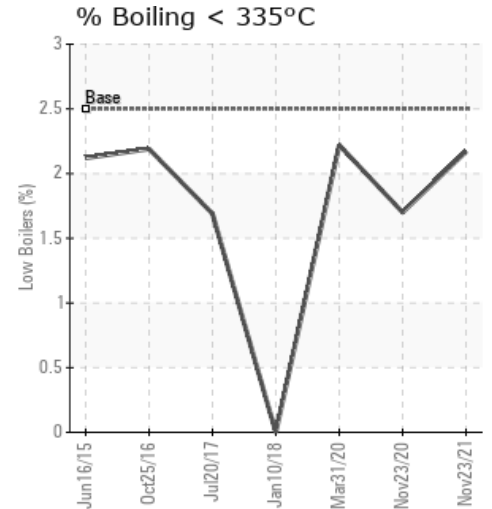
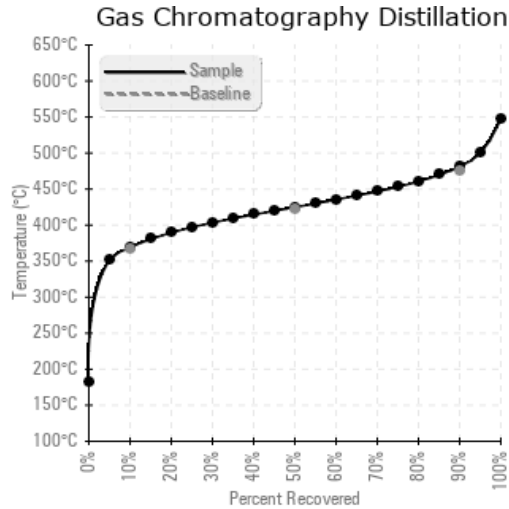
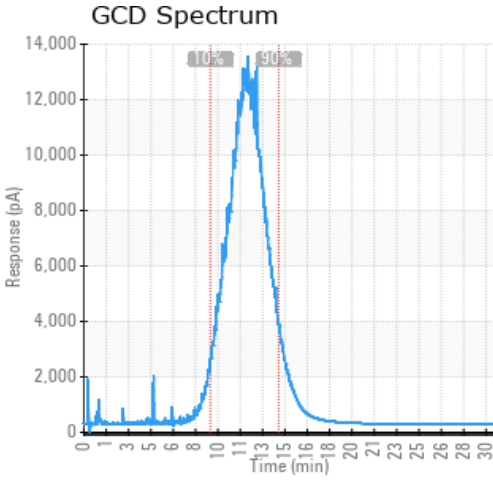
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
11/23/21	12/07/21	0.0y		428 / 220	11.4	29.7	0.08	0.077	696 / 369	797 / 425	898 / 481	2.17
11/23/20	12/17/20	20.0y	rtrn b4 gas burner	432 / 222	23.7	29.8	0.07	0.074	698 / 370	798 / 425	899 / 482	1.70
03/31/20	07/07/20	20.0y	NEAR RETURN	421 / 216	19.2	29.8	0.06	0.161	697 / 369	798 / 425	898 / 481	2.22
01/10/18	01/23/18	10.0y		396 / 202	2.6	30.0	0.078	0.038	691 / 366	784 / 418	888 / 476	0.00
07/20/17	09/06/17	20.0y	RETURN B4 GAS BURNER	399 / 204	31.3	30.1	0.080	0.044	697 / 370	801 / 427	897 / 480	1.69
Baseline Data				435 / 224		32.7	0.03		693 / 367	790 / 421	887 / 475	2.5





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	
11/23/21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	
11/23/20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0
03/31/20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0
01/10/18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0
07/20/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0
Baseline Data			0	0						0			0	0					0					270	

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



Historical Comments

11/23/20	Unlike the sample from line 1/2, this fluid looks to be in overall good condition. I note the different operating temperatures and this will influence that for sure, with this product operating 50C lower. There is a little evidence of cracking on the GCD curve but nothing substantial. The fluid meets all parameters expected and is fit for further use.
03/31/20	All parameters meet specification with no concerns. Please resample at normal frequency
01/10/18	The current fluid condition is very similar to the last sample in July 2017. The fluid has normal viscosity, flash point and distillation point. The water and solid contamination is low. Please continue to run this fluid and take one sample in 12 months.
07/20/17	The current fluid has normal viscosity, flash point, acid number and distillation points. It is suitable for further use. Please take one sample in one year to monitor the conditions.

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