

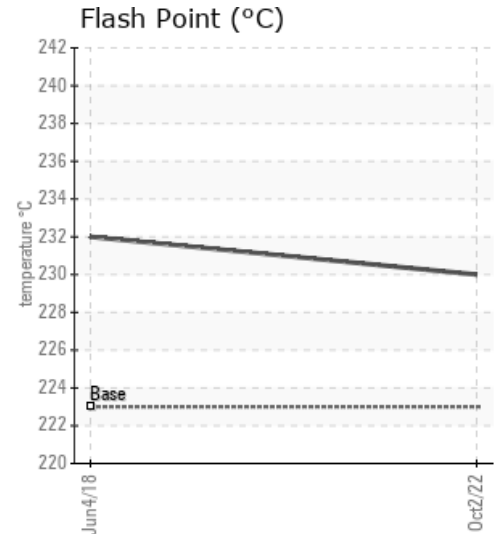
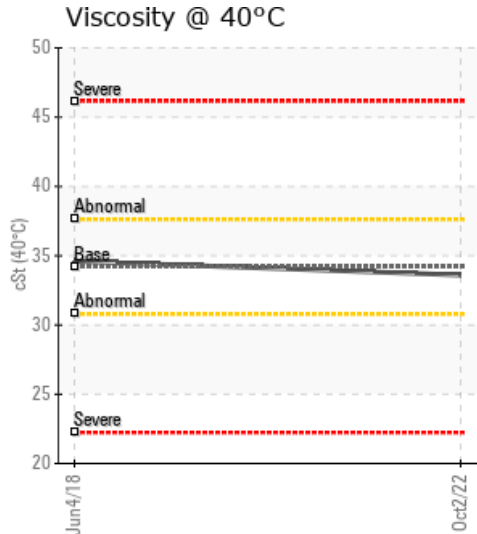
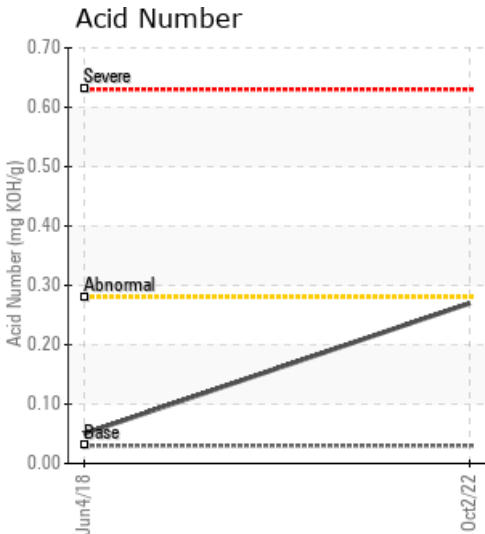
[ATHABASCA OIL CORP / 10-19-66-22W5] UHM 10-19

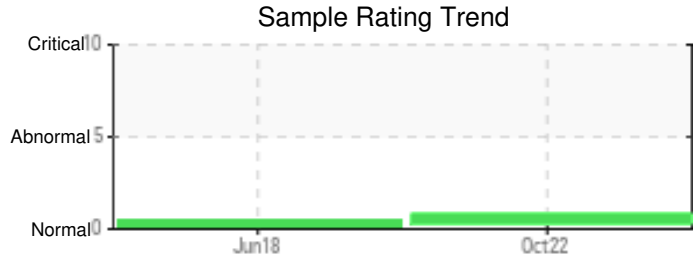
Customer: PTRHTF20232	System Information	Sample Information
ATHABASCA OIL CORPORATION	System Volume: 26000 ltr	Lab No: 02515094
FOX CREEK, AB Canada	Bulk Operating Temp: 428F / 220C	Analyst: Clinton Buhler
Attn: Jason Carmichael	Heating Source:	Sample Date: 10/02/22
Tel: (780)844-2422	Blanket:	Received Date: 10/06/22
E-Mail: jcarmichael@atha.com	Fluid: PETRO CANADA PETRO-THERM	Completed: 10/12/22
	Make:	Clinton Buhler
		Clinton.Buhler@HFSinclair.com

Recommendation: Sample results indicate that the fluid is in suitable condition for continued service. Please ensure blanket gas is operational in the expansion tank to prevent fluid oxidation. please re-sample in 6 months.

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

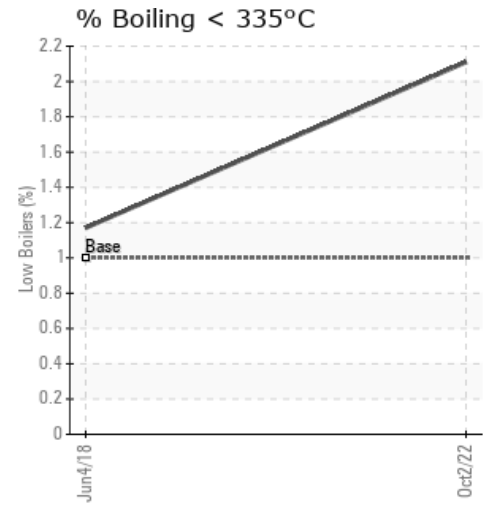
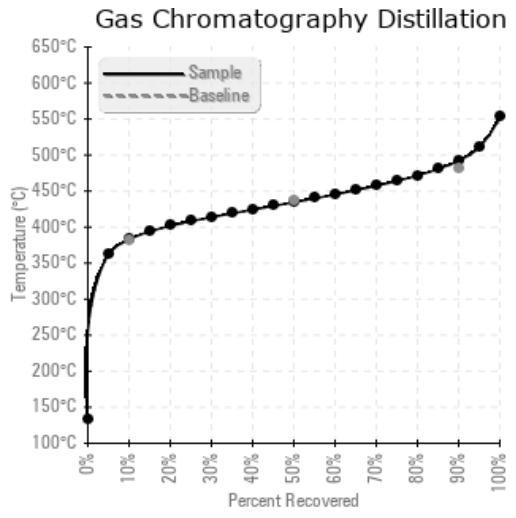
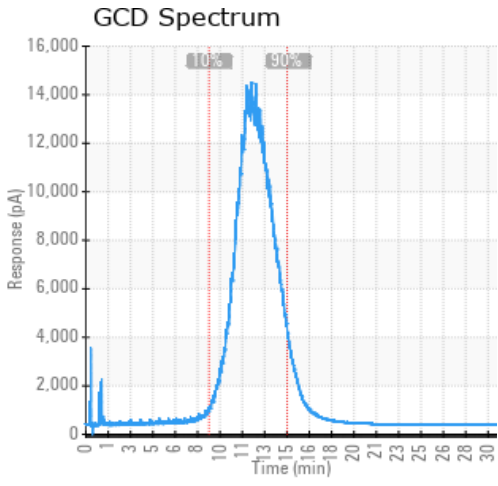
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
10/02/22	10/06/22	10.0y		446 / 230	55.4	33.6	0.27	0.044	721 / 383	814 / 435	918 / 492	2.11
06/04/18	06/05/18	7.0y		450 / 232	176.0	34.6	0.05	0.049	716 / 380	812 / 433	917 / 492	1.17
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
10/02/22	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
06/04/18	12	0	0	0	0	0	0	0	0	0	1	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

06/04/18	The fluid is in a good condition and suitable for further use. Please re-sample in 12 months.

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