

[14-36-57-23W5] H1008

Customer: PTRHTF20276
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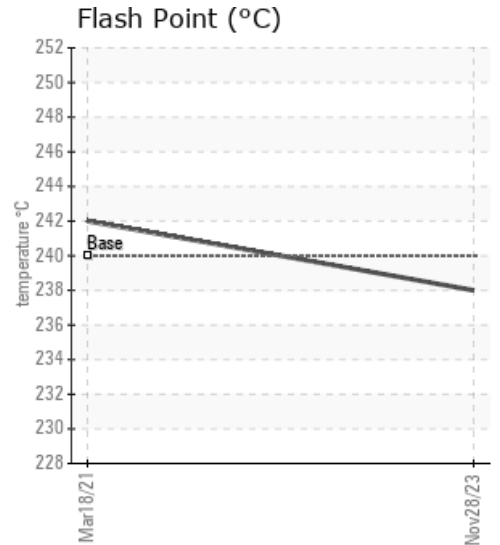
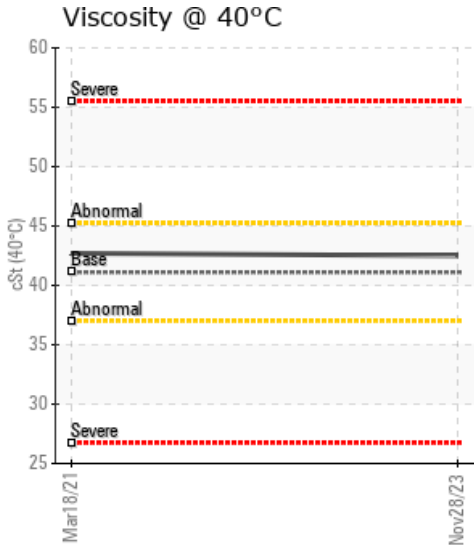
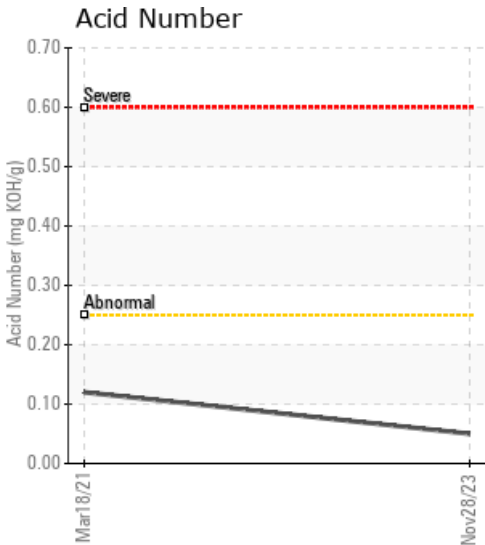
System Information
 System Volume: 15000 ltr
 Bulk Operating Temp: 410F / 210C
 Heating Source:
 Blanket:
 Fluid: CHEVRON HEAT TRANSFER OIL 46
 Make: ALCO

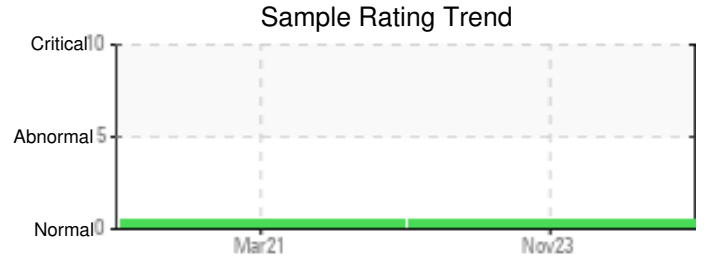
Sample Information
 Lab No: 02601077
 Analyst: Clinton Buhler
 Sample Date: 11/28/23
 Received Date: 12/05/23
 Completed: 01/02/24
 Clinton Buhler
 Clinton.Buhler@HFSinclair.com

Recommendation: Sample results indicate that the fluid is in suitable condition for continued service. Please re-sample in 12 months.

Comments:

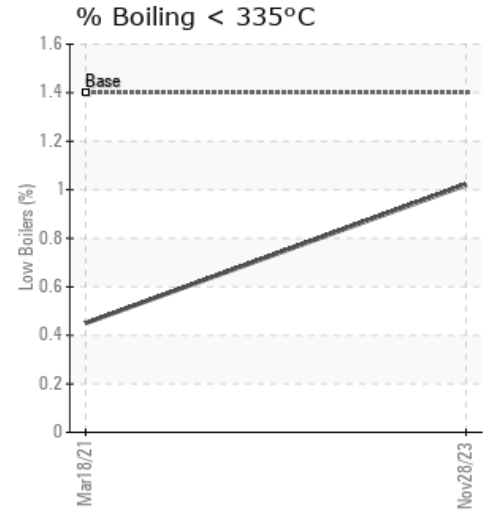
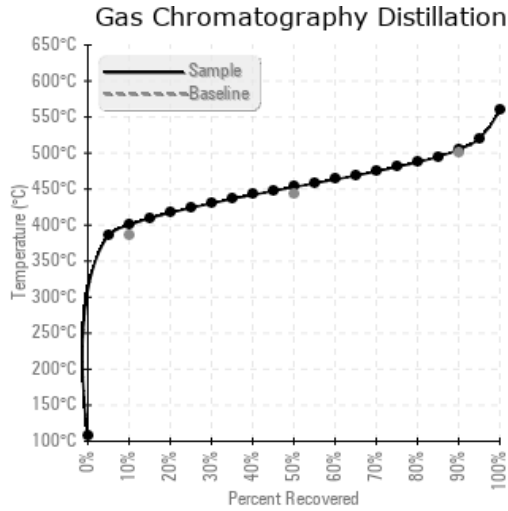
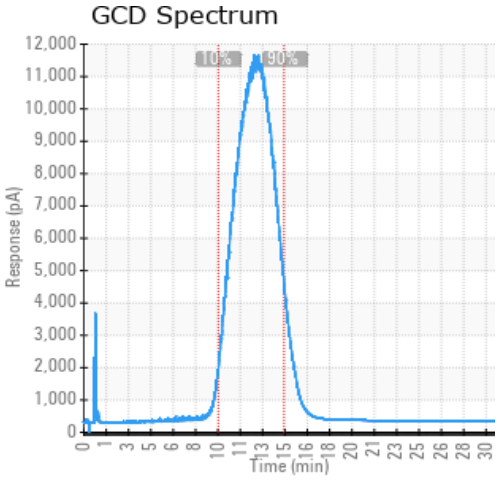
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
11/28/23	12/05/23	0.0y		460 / 238	16	42.5	0.05	0.057	752 / 400	847 / 453	941 / 505	1.02
03/18/21	03/29/21	6.0y	downstream of pump	468 / 242	14.3	42.7	0.12	0.094	737 / 392	812 / 433	921 / 494	0.45
Baseline Data				464 / 240		41.1			727 / 386	828 / 442	932 / 500	1.4





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
11/28/23	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	1
03/18/21	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	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

03/18/21	Sample results indicate that the fluid is in suitable condition for continued service. Please re-sample in 6 months to help establish a trend

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