

LOWER TANK FARM

Customer: PTRHTF10125
 TRANSMONTAIGNE
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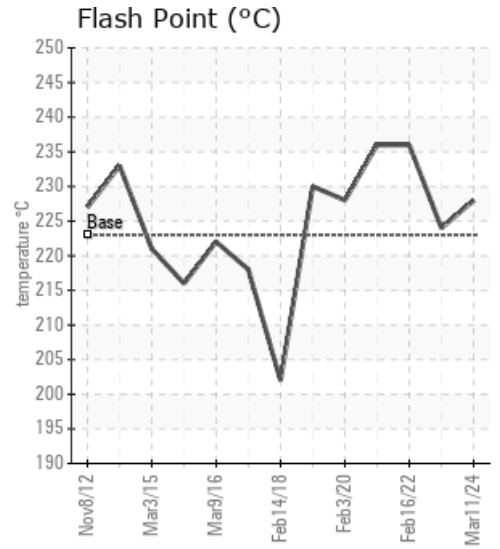
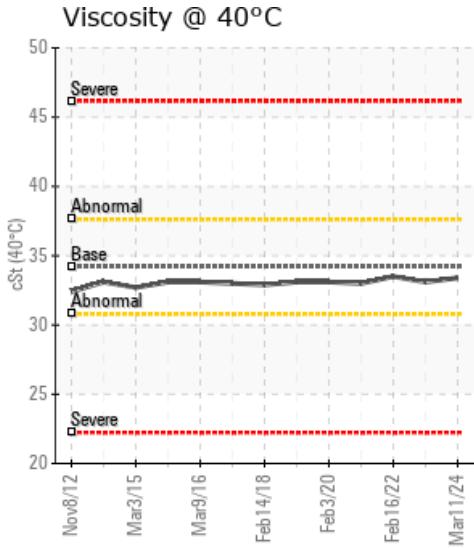
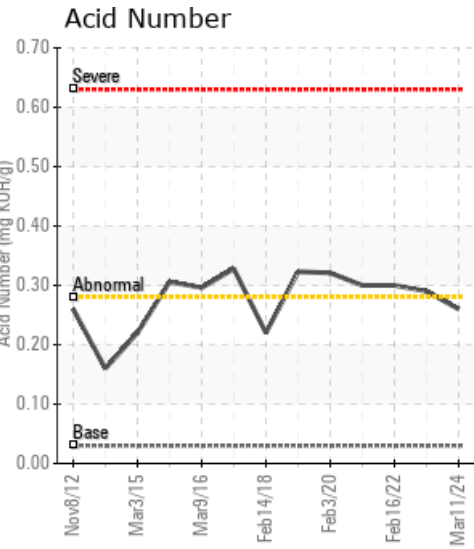
System Information
 System Volume: 2500 gal
 Bulk Operating Temp: 300F / 149C
 Heating Source:
 Blanket:
 Fluid: PETRO CANADA PETRO-THERM
 Make: AMERICAN HEATING

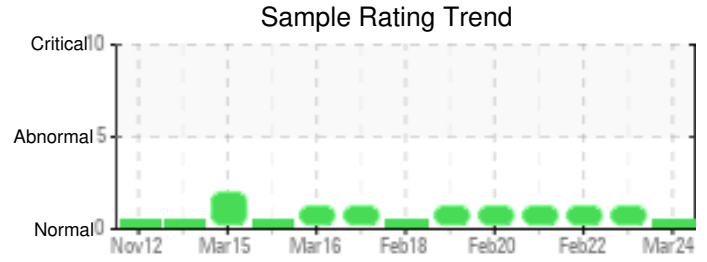
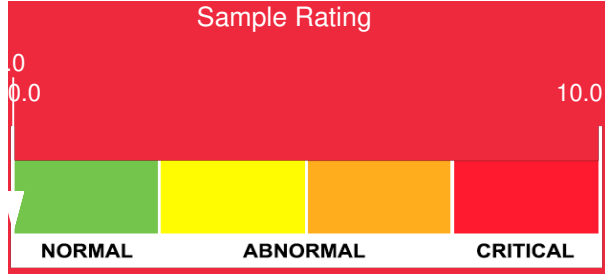
Sample Information
 Lab No: 02626268
 Analyst: Joe Goecke
 Sample Date: 03/11/24
 Received Date: 04/02/24
 Completed: 04/11/24
 Joe Goecke
 Joe.goecke@HFSinclair.com

Recommendation: Sample is in great condition and fluid can be used until next scheduled sampling.

Comments:

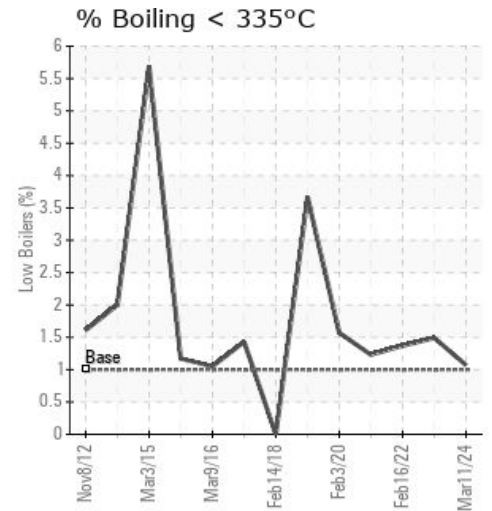
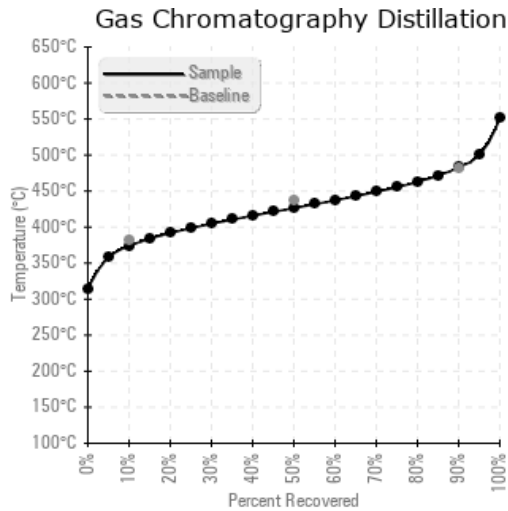
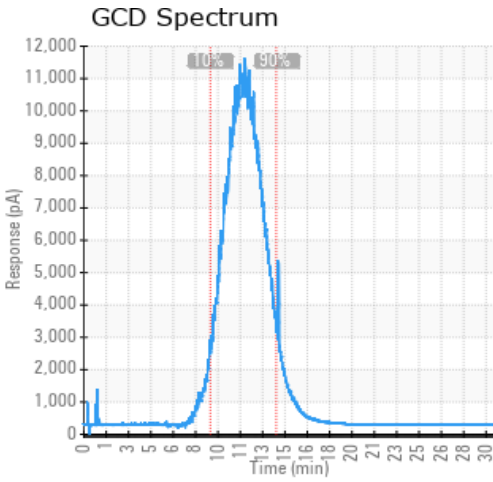
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
03/11/24	04/02/24	12.0y	BOOSTER PUMP	442 / 228	0	33.4	0.26	0.039	705 / 374	800 / 426	901 / 483	1.07
02/21/23	03/16/23	11.0y		435 / 224	0.00	33.1	0.29	0.069	704 / 373	801 / 427	904 / 484	1.49
02/16/22	03/17/22	9.4y		457 / 236	0.00	33.5	0.30	0.065	704 / 373	800 / 427	902 / 483	1.37
03/07/21	03/17/21	8.4y		457 / 236	1.9	33.0	0.30	0.107	699 / 370	787 / 419	884 / 473	1.23
02/03/20	03/09/20	7.3y	BOOSTEN PUMP	442 / 228	0.00	33.1	0.321	0.077	701 / 372	812 / 433	917 / 492	1.57
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	
03/11/24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	204	0	
02/21/23	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	231	0
02/16/22	2	0	0	0	0	0	0	0	0	0	2	1	2	0	0	0	0	0	0	0	0	0	0	218	0
03/07/21	3	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	1	0	198	0
02/03/20	4	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	226	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

02/21/23	Sample does not show any signs of degradation. Continue to use and resample at next scheduled interval. Acid Number (AN) is abnormally high.
02/16/22	All parameters are consistent with last sample. continue to use and resample at next scheduled interval. Acid Number (AN) is abnormally high.
03/07/21	Acid number is high but in line with where it has been. I would suggest a partial exchange of this oil since it has been high for a while. All other parameters look great and can be continued to be used as planned. Acid Number (AN) is abnormally high.
02/03/20	Product looks very good. Minimal acid build up with all other numbers in line. Continue to use and resample at next scheduled interval. Acid Number (AN) is abnormally high.

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