

[KEYERA PARTNERSHIP / 3-12-46-14W5] PLANT 2

Customer: PTRHTF30084
 Keyera Partnership Brazeau River Ga...
 Box 7318
 Drayton Valley, AB T7A 1S5 CA
 Attn: Gareth Buchanan
 Tel: (780)913-1176
 E-Mail: gareth_buchanan@keyera.com

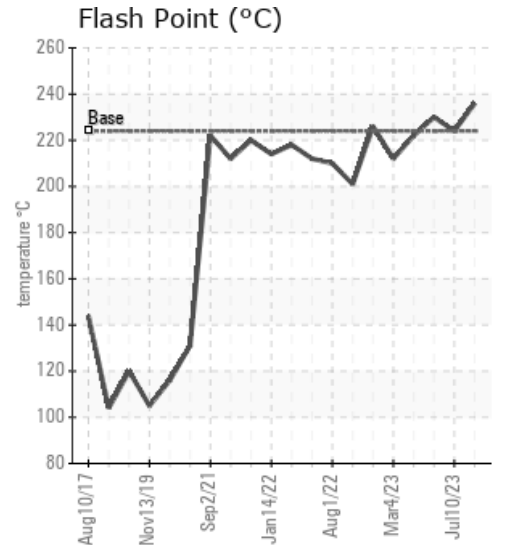
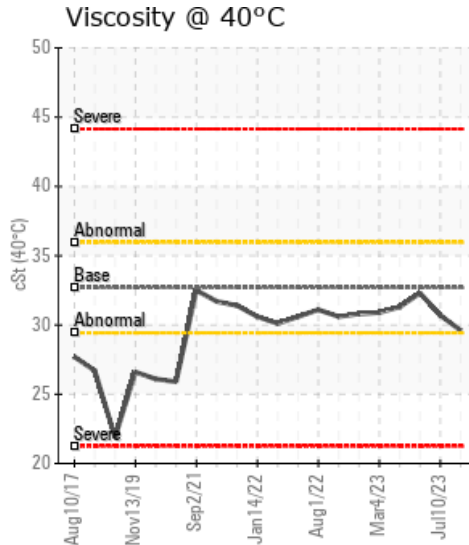
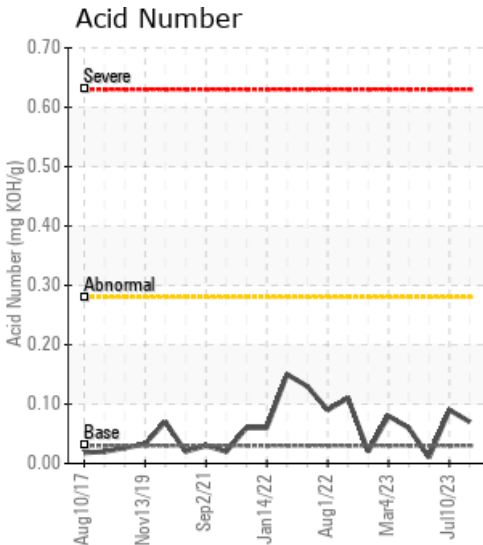
System Information
 System Volume: 14000 ltr
 Bulk Operating Temp: 455F / 235C
 Heating Source:
 Blanket:
 Fluid: PETRO CANADA CALFLO AF
 Make: PETROTHERM ENG.

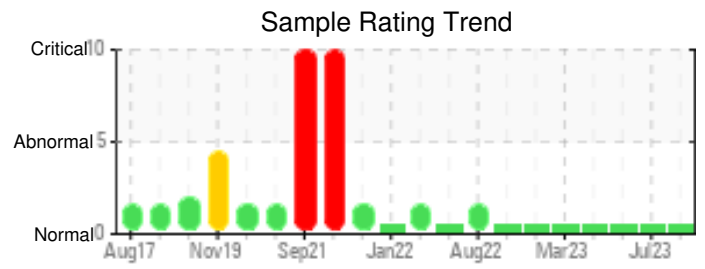
Sample Information
 Lab No: 02588447
 Analyst: Lyle Dach
 Sample Date: 10/01/23
 Received Date: 10/11/23
 Completed: 10/20/23
 Lyle Dach
 lyle.dach@HFSinclair.com

Recommendation: Sample results indicate that the fluid is in suitable condition for continued service. Resample in 12 months.

Comments:

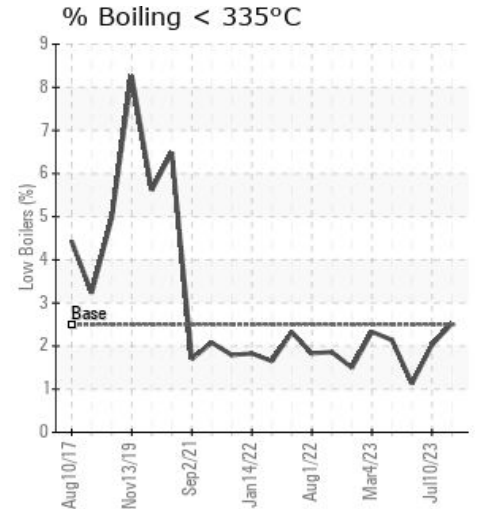
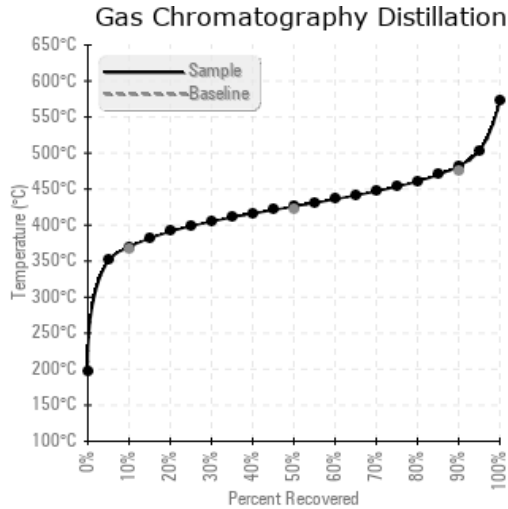
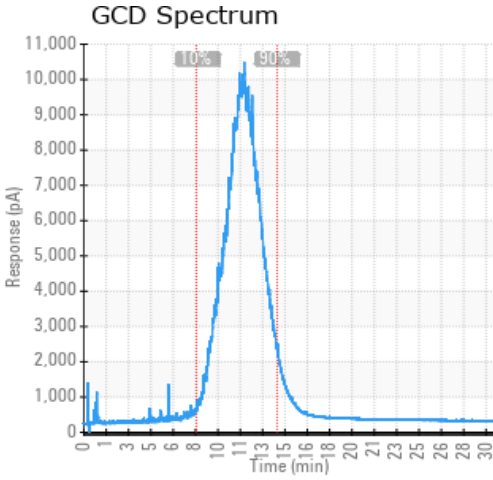
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
10/01/23	10/11/23	40.0m	AFTER PUMP	457 / 236	27.7	29.6	0.07	0.061	697 / 370	799 / 426	899 / 482	2.52
07/10/23	07/19/23	24.0m	after main pump	435 / 224	28.9	30.7	0.09	0.044	704 / 373	804 / 429	899 / 482	2.03
03/24/23	04/05/23	24.0m	hoh2 18-60	446 / 230	5.4	32.3	0.01	0.080	701 / 372	798 / 425	901 / 483	1.13
03/24/23	04/05/23	24.0m	hoh2 18-59	432 / 222	19.0	31.3	0.06	0.103	703 / 373	803 / 429	900 / 482	2.14
03/04/23	03/13/23	20.0m		414 / 212	37.7	30.9	0.08	0.049	702 / 372	804 / 429	900 / 482	2.33
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
10/01/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	49	0
07/10/23	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	58	1
03/24/23	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	296	1
03/24/23	13	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	0	0	88	0
03/04/23	7	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	8	0	0	0	54	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

07/10/23	Sample results indicate that the fluid is in suitable condition for continued service. Resample in 12 months.
03/24/23	Sample results indicate the fluid is in good condition, the color on this sample is brighter and clear it almost appears to be new fluid vs the other recent samples. This sample was collected from the seal pot tank. Water content is very low.
03/24/23	From the sample results fluid condition is very good, the sample color looks similar to the last sample collected on March 4 2023. This sample was collected from the seal pot. Water content is very low.
03/04/23	Fluid looks to be in very good condition and is suitable for continued use. Water content is very low, venting program appears to be working well. Resample in 6 months.

Petro-Canada makes no representation or warranty of any kind, either express or implied, as to the accuracy or completeness of the analysis and assumes no responsibility and shall have no liability whatsoever with respect to such analysis, or a party's use of it. Petro-Canada is a division of HollyFrontier Corporation.