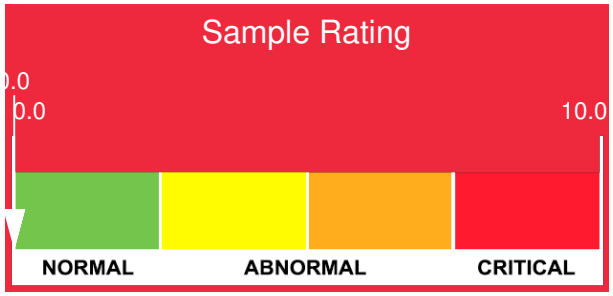
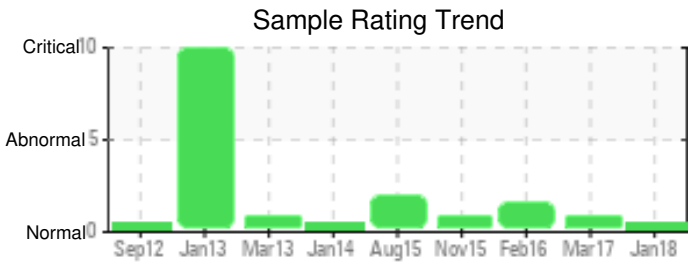




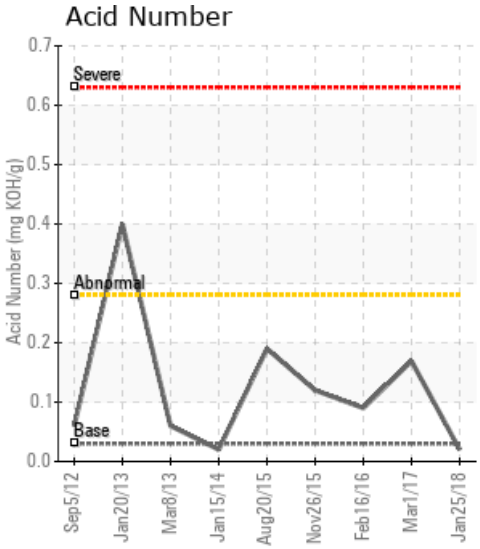
[DEASE DEVINE / LSD 12-27-81-18W6] CREW ENERGY SEPTIMUS PLANT SK-1500

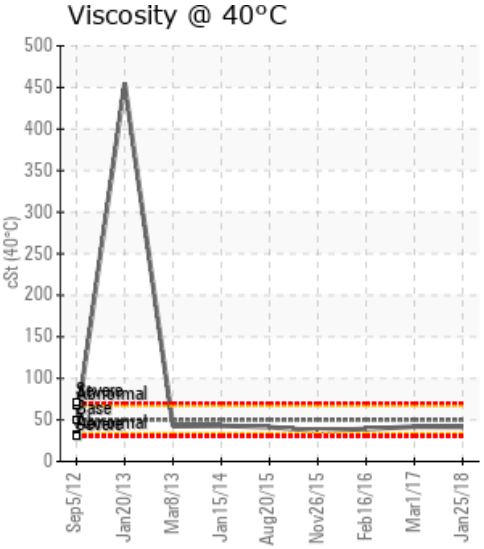
Customer: PTRHTF20109	System Information	Sample Information
Crew Energy Septimus Plant 12-27-81-18W6 8043-100TH AVENUE FORT ST.JOHN, BC V1J 1W2 Canada Attn: Dease Devine Tel: (250)262-1957 E-Mail: deasedevine@crewenergy.com	System Volume: 24000 ltr Bulk Operating Temp: 356F / 180C Heating Source: Blanket: Fluid: SUNOCO SUN HEAT TRANSFER 21 PD Make: NATCO	Lab No: 02203261 Analyst: Kevin Marson Sample Date: 01/25/18 Received Date: 03/12/18 Completed: 03/13/18 To discuss this report contact Kevin Marson at (905)569-8600

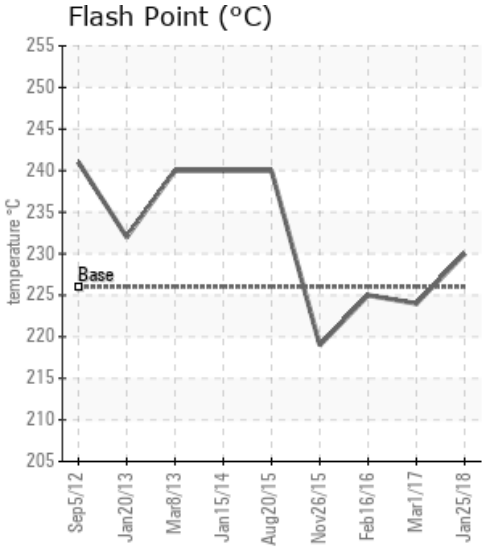
Recommendation: Resample at the next service interval to monitor.

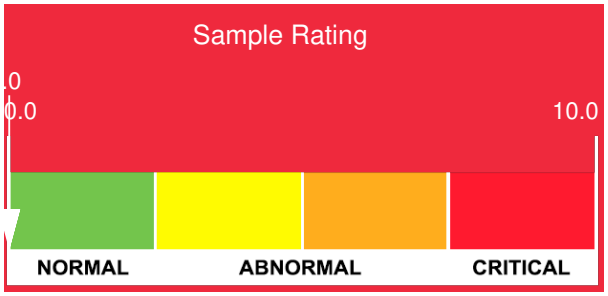
Comments: All component wear rates are normal. The water content is negligible. There is no indication of any contamination in the fluid. The AN level is acceptable for this fluid. The condition of the fluid is suitable for further service.

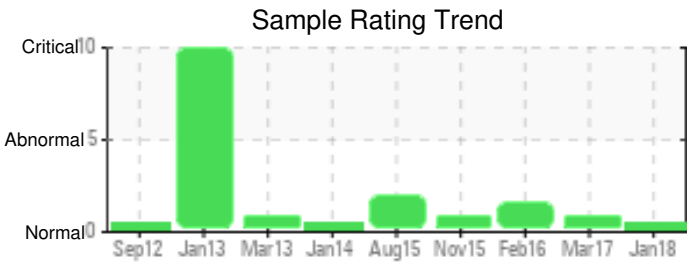
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
01/25/18	03/12/18	0y		446 / 230	1.5	41.7	0.02	0.350	731 / 388	800 / 426	892 / 478	0.00
03/01/17	03/10/17	6y	PUMP DISCHARGE	435 / 224	8.6	41.9	0.169	0.366	736 / 391	835 / 446	933 / 501	0.54
02/16/16	02/25/16	0y	SK1500	437 / 225	21.2	39.2	0.09	0.438	732 / 389	834 / 446	925 / 496	1.37
11/26/15	12/03/15	2y	PUMP DISCHARGE	426 / 219	0.00	36.8	0.12	0.534	720 / 382	826 / 441	920 / 493	3.29
08/20/15	09/15/15	0y	PUMP SUCTION	464 / 240	0.00	41.4	0.19	0.265	740 / 393	843 / 450	959 / 515	0.25
01/15/14	01/23/14	0y	PUMP DISCHARGE	464 / 240	11.2	43.0	0.02	0.329	735 / 391	832 / 444	921 / 494	0.41
Baseline Data				439 / 226		50.0	0.03		777 / 414		900 / 482	0.25





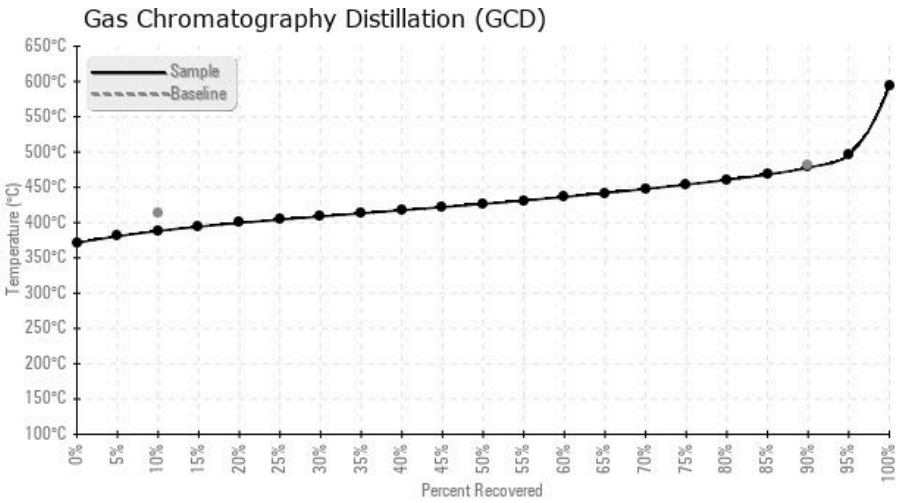


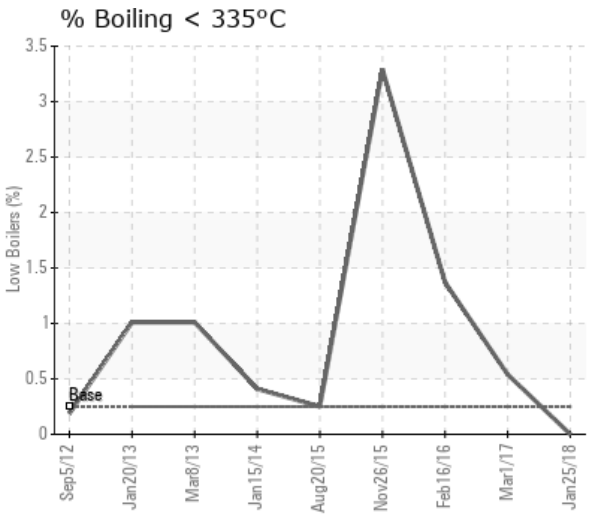




Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
01/25/18	18	0	0	0	0	0	0	1	0	0	3	1	1	0	0	0	0	0	0	0	1	0	0	0
03/01/17	31	0	0	0	0	0	1	1	0	0	3	1	1	0	0	0	0	0	0	0	1	0	1	0
02/16/16	28	0	0	0	0	0	0	1	0	0	3	1	1	0	0	0	0	0	1	0	1	0	1	1
11/26/15	29	0	0	0	0	0	0	1	0	0	3	1	2	0	0	0	0	0	0	0	1	0	1	0
08/20/15	30	0	0	0	0	0	0	2	0	0	3	1	2	0	0	0	0	0	1	0	2	0	1	0
01/15/14	27	0	0	0	0	0	0	2	0	0	4	0	1	0	0	0	0	0	1	0	2	0	1	0
Baseline Data			0	0						0			0	0					0				0	

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





Historical Comments

03/01/17	Resample at the next service interval to monitor. The water content is negligible. There is no indication of any contamination in the component. (GCD) 90% Distillation Point is marginally high. The AN level is acceptable for this fluid. The condition of the fluid is suitable for further service.
02/16/16	(GCD) 90% Distillation Point is marginally high however is improved over previous sample. Pentane insoluables has stabilized. TAN and Viscosity continue to look good. Continue to operate and resample in 6 months. Pentane Insolubles levels are abnormally high. (GCD) 90% Distillation Point is marginally high.
11/26/15	(GCD) 90% Distillation Point is marginally high however is improved over previous sample. (GCD) 10% Distillation Point is marginally low. Pentane insoluables has risen slightly. TAN and Viscosity both look good. Continuew to operate and resample in 6 months. Pentane Insolubles levels are abnormally high. (GCD) 90% Distillation Point is marginally high. (GCD) 10% Distillation Point is marginally low.
08/20/15	GCD @90% is a little high indicating some heavier ends in the oil. TAN is starting to come up but still within Spec. (GCD) 90% Distillation Point is severely high.
01/15/14	

