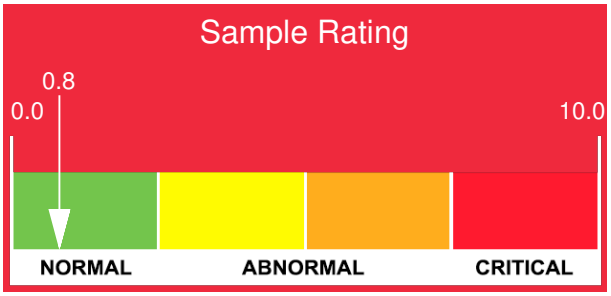
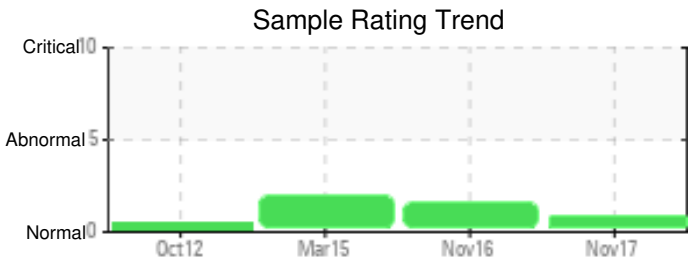




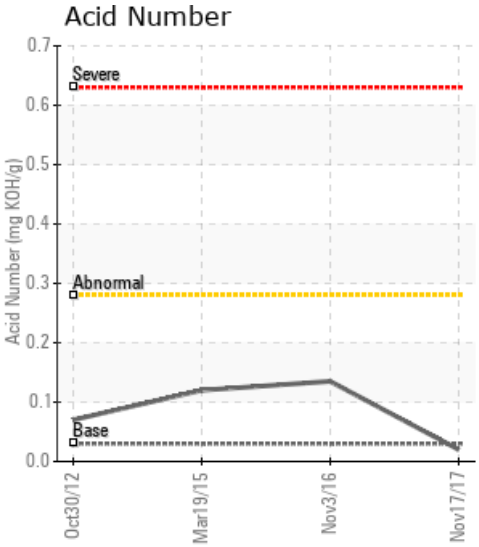
TPC450LN-MP

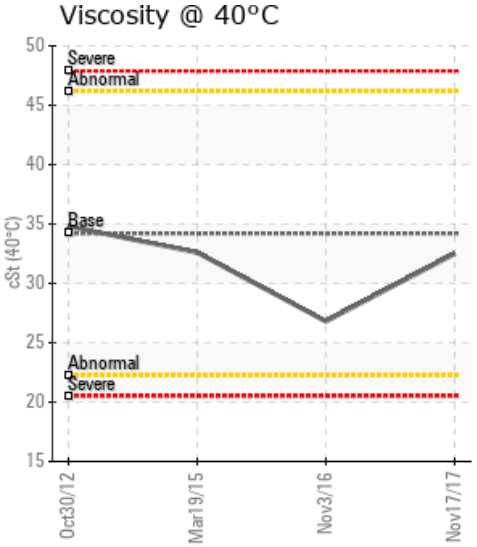
Customer: PTRHTF40102	System Information	Sample Information
BOLSCHER BV STROOTS WEG 40 ENSCHEDE, TH Attn: WILBERT SNYERS Tel: E-Mail:	System Volume: 1500 ltr Bulk Operating Temp: 275F / 135C Heating Source: Blanket: Fluid: PETRO CANADA PETRO-THERM Make: WANSON	Lab No: 02183194 Analyst: Alexander Panov Sample Date: 11/17/17 Received Date: 11/21/17 Completed: 03/27/18 To discuss this report contact Alexander Panov at (496)214-4586269

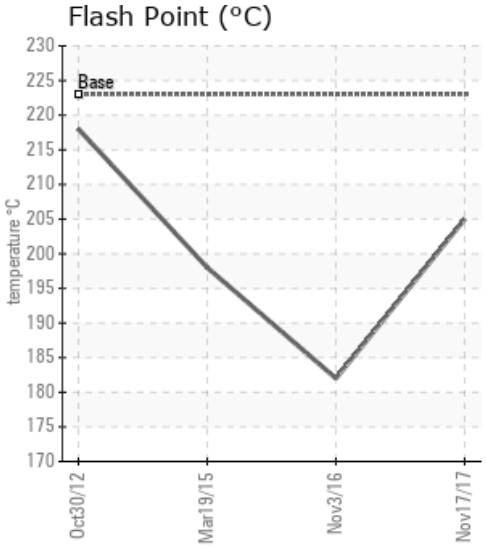
Recommendation: Fluid is fit for use, continue sampling at planned interval

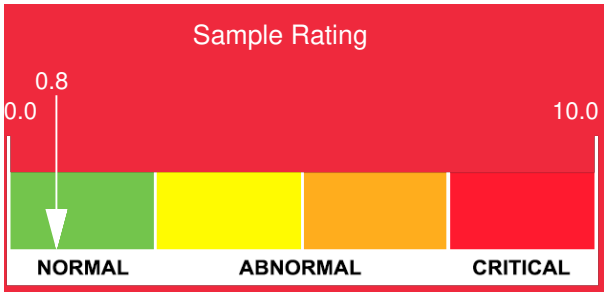
Comments: (GCD) 90% Distillation Point is marginally high.

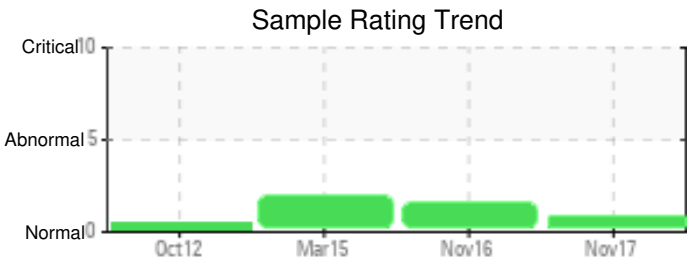
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
11/17/17	11/21/17	5y		401 / 205	8.1	32.5	0.02	0.060	710 / 377	816 / 436	921 / 494	2.12
11/03/16	11/11/16	4y		360 / 182	13.8	26.8	0.135	0.080	702 / 372	812 / 433	922 / 495	2.78
03/19/15	06/25/15	3y		388 / 198	12.9	32.6	0.12	0.021	717 / 380	815 / 435	923 / 495	0.41
10/30/12	11/12/12		NA	424 / 218	34	34.8	0.07	0.028	719 / 382	809 / 432	920 / 493	0.663
Baseline Data				433 / 223		34.2	0.03		720 / 382	817 / 436	900 / 482	1.00





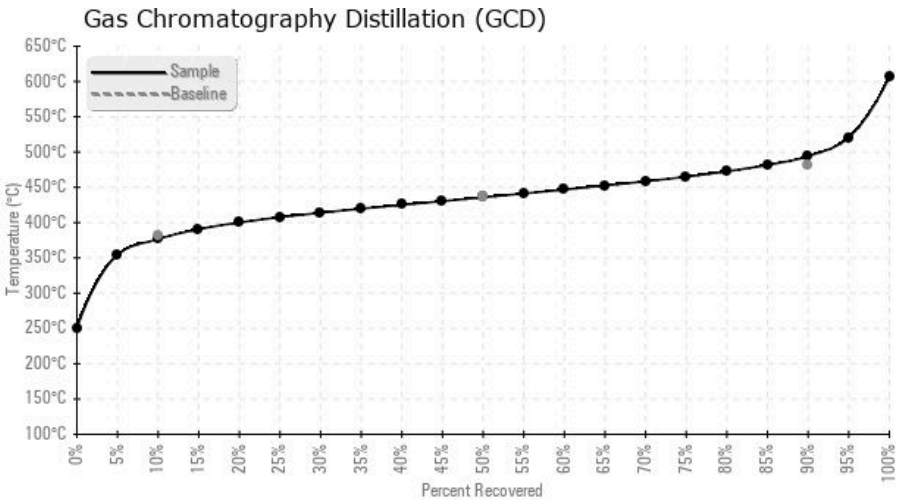


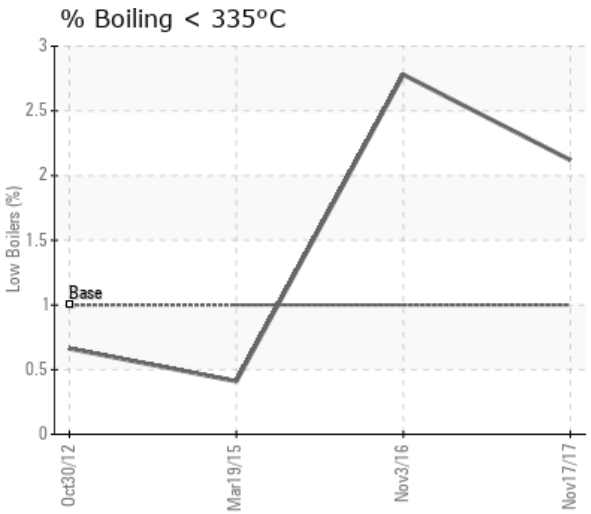




Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
11/17/17	15	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	10	20
11/03/16	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	3
03/19/15	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	10	0
10/30/12	6	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	1
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

11/03/16	The oil is fit for further service. Suggest sample at next scheduled maintenance interval. (GCD) 90% Distillation Point is marginally high. COC Flash Point is marginally low.
03/19/15	Oil appears to be fit for further service.Sample at next scheduled maintenance interval. (GCD) 90% Distillation Point is marginally high.
10/30/12	Oil fit for further service