

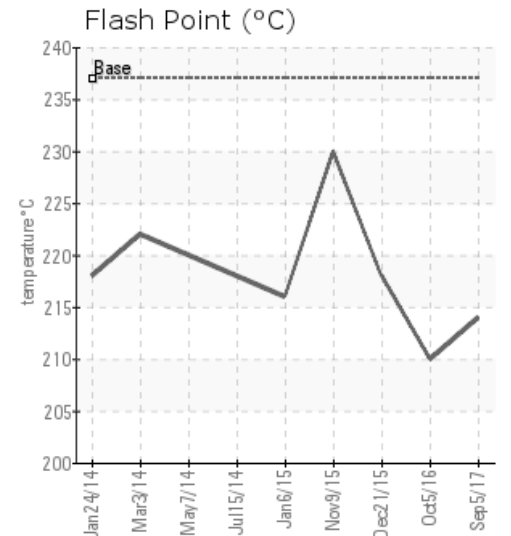
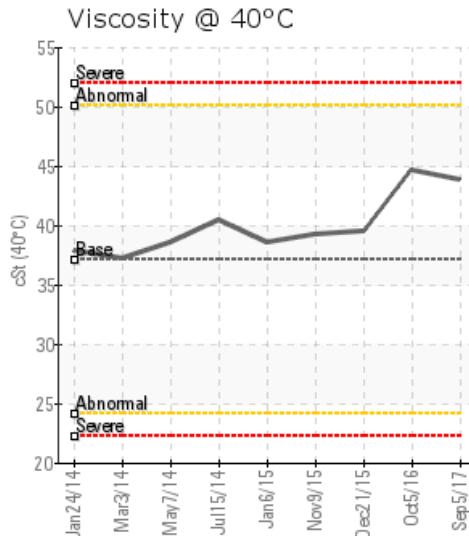
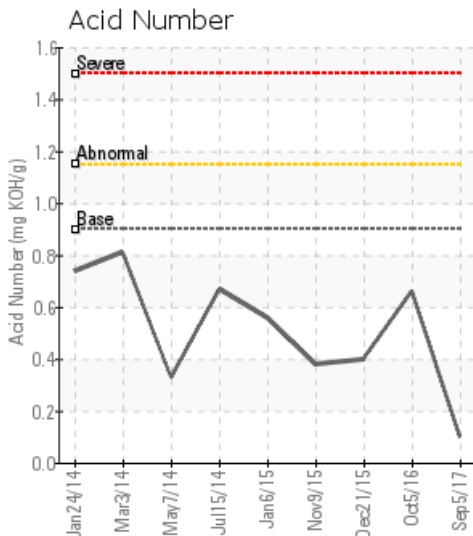
LEZITA - GUCSAN HOT OIL BOILER

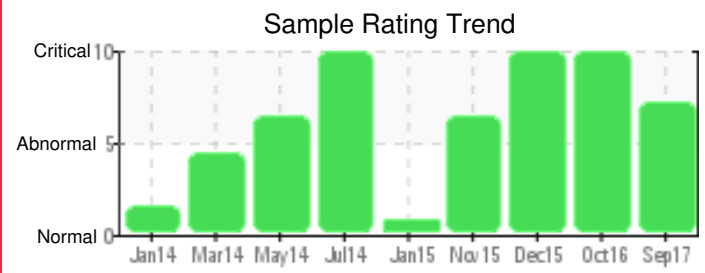
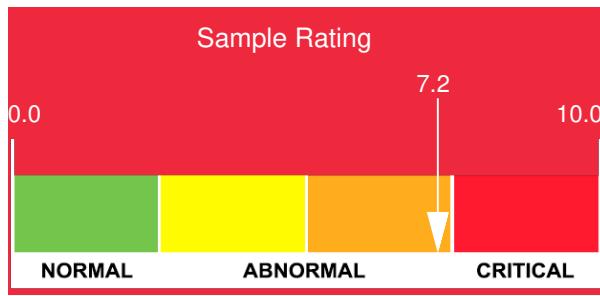
Customer: PTRHTF40074	System Information	Sample Information
LUBRICON LTD STI ATASEHIR ISTANBUL ISTANBUL, 34770 Attn: Murat Baslilar Tel: E-Mail: mbaslilar@lubricon.com.tr	System Volume: 12000 ltr Bulk Operating Temp: 536F / 280C Heating Source: Blanket: Fluid: PETRO CANADA PURITY FG HEAT TRANSFER FLUID Make: GUGSAN-2011/029	Lab No: 02183009 Analyst: Philip Riley Sample Date: 09/05/17 Received Date: 11/20/17 Completed: 11/27/17 To discuss this report contact Philip Riley at (440)124-4378171

Recommendation: sample improved from previous, but still has presence of abnormally high iron, particle count high, insoluble high and cleanliness poor. However, suspect sweetening or treatment occurred from last sample. Would recommend further 'filtration' if possible to keep improving the oil and therefore the oil life. Without filtration/cleaning in correct manner will restrict the life of the oil.

Comments: PQ levels are severe. Iron ppm levels are abnormal. Pentane Insolubles levels are severely high. (GCD) 90% Distillation Point is marginally high.

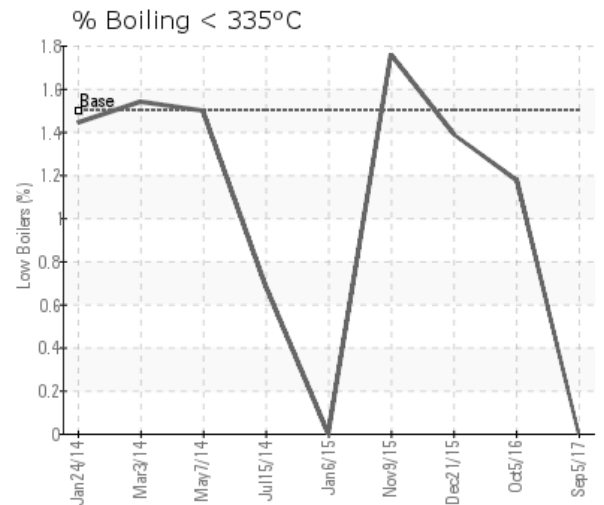
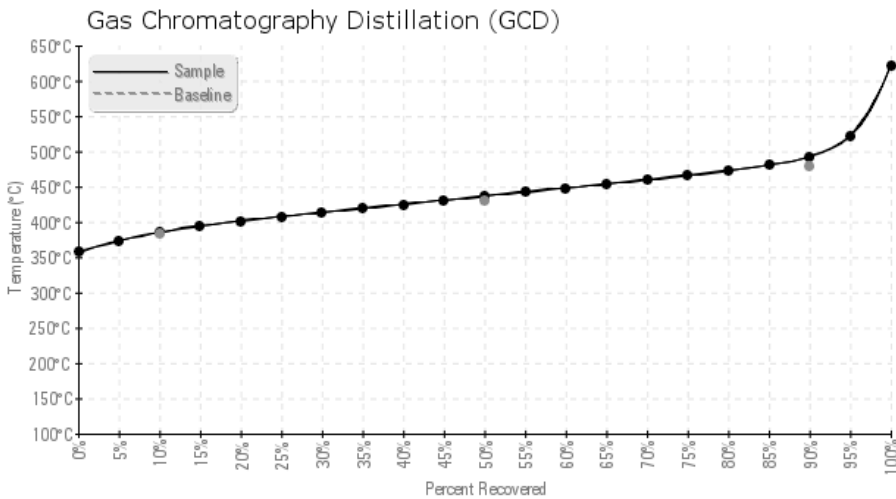
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
09/05/17	11/20/17	41600h		417 / 214	19.8	43.8	0.10	0.842	725 / 385	818 / 436	918 / 492	0.00
10/05/16	10/17/16	33000h		410 / 210	141.4	44.7	0.66	2.87	718 / 381	813 / 434	906 / 485	1.18
12/21/15	12/29/15	26000h	CHARGE LINE	424 / 218	20.7	39.5	0.40	1.02	716 / 380	807 / 431	896 / 480	1.39
11/09/15	11/25/15	25000h		446 / 230	18.8	39.2	0.38	0.596	709 / 376	804 / 429	899 / 481	1.76
01/06/15	01/16/15	1248h		421 / 216	27.0	38.6	0.56	0.505	723 / 384	815 / 435	912 / 489	0.00
07/15/14	07/28/14	0h	AFTER FILTER	424 / 218	0.00	40.5	0.67	0.886	717 / 381	809 / 431	907 / 486	0.69
Baseline Data				459 / 237		37.12	0.90		721 / 383	807 / 431	892 / 478	1.5





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
09/05/17	197	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	45	0
10/05/16	1933	2	1	2	3	0	0	3	0	0	7	4	0	0	0	0	9	0	1	1	3	0	171	3
12/21/15	462	1	0	0	1	0	0	0	0	0	2	1	0	0	0	0	2	0	0	0	0	0	52	1
11/09/15	328	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0	1	0	0	0	1	0	46	1
01/06/15	102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	42	1
07/15/14	429	0	0	0	1	0	0	2	0	0	1	1	0	0	0	0	2	0	1	0	2	0	59	2
Baseline Data			0	0						0			0	0					0				230	

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



Historical Comments

10/05/16	Oil requires cleaning or changing. Iron ppm levels are severe. PQ levels are severe. Pentane Insolubles levels are severely high. Visc @ 40°C is abnormally high.
12/21/15	Oil is contaminated. Suggest change oil at earliest possible time. Iron ppm levels are severe. PQ levels are severe. Pentane Insolubles levels are severely high.
11/09/15	The oil is not clean and is causing thickening which will cause potential pump wear. Suggest changing the oil at the next scheduled maintenance interval. PQ levels
01/06/15	Oil appears to be in good condition, solids appear to be under control albeit higher than expected levels noted. Suggests oil is fit for further use, sample at next
07/15/14	Oil continues to have high levels of insolubles.

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. Suncor Energy Inc is the proud owner of Petro-Canada.