

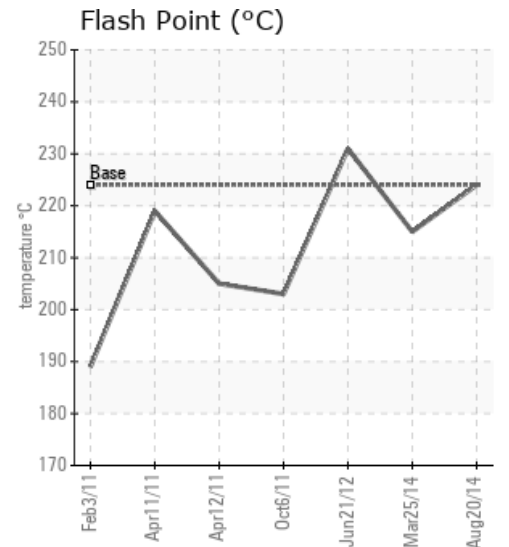
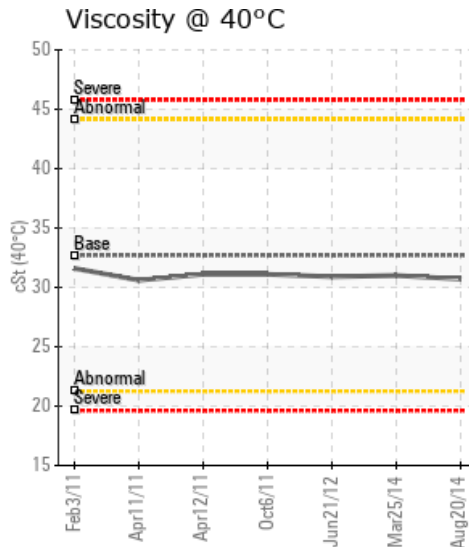
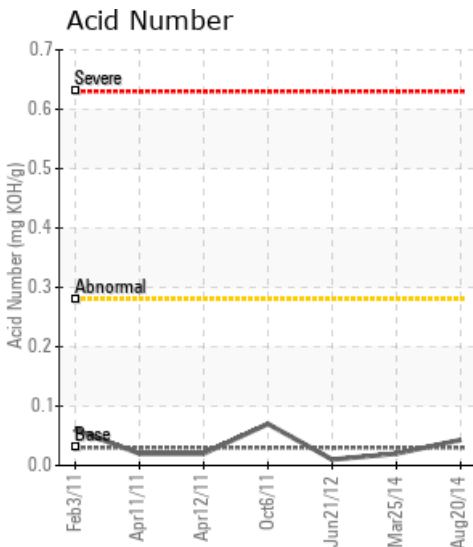
PLANT 3.0

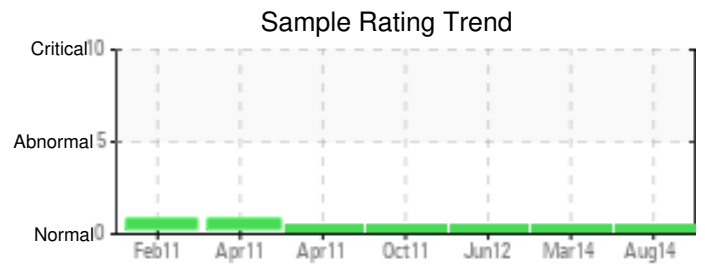
Customer: PTRHTF10093	System Information	Sample Information
REC GROUP 3322 ROAD N N.E. MOSES LAKE, WA 98837 USA Attn: Sam Bright Tel: (509)766-8902 E-Mail: sam.bright@recsilicon.com	System Volume: 50000 gal Bulk Operating Temp: 450F / 232C Heating Source: Blanket: Fluid: PETRO CANADA CALFLO AF Make: COEN	Lab No: 01940664 Analyst: Bill Quesnel CLS, OMA II, MLA-III, LLA-I Sample Date: 08/20/14 Received Date: 08/28/14 Completed: 04/10/18 To discuss this report contact Bill

Recommendation: Resample at the next service interval to monitor. NOTE: Sample is more than 1 year old and was never completed. Closing out in LIMS system.

Comments: There is no indication of any contamination in the fluid. The condition of the fluid is suitable for further service.

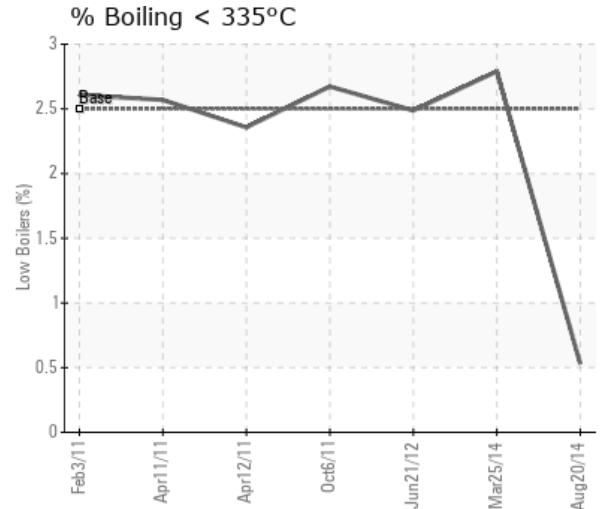
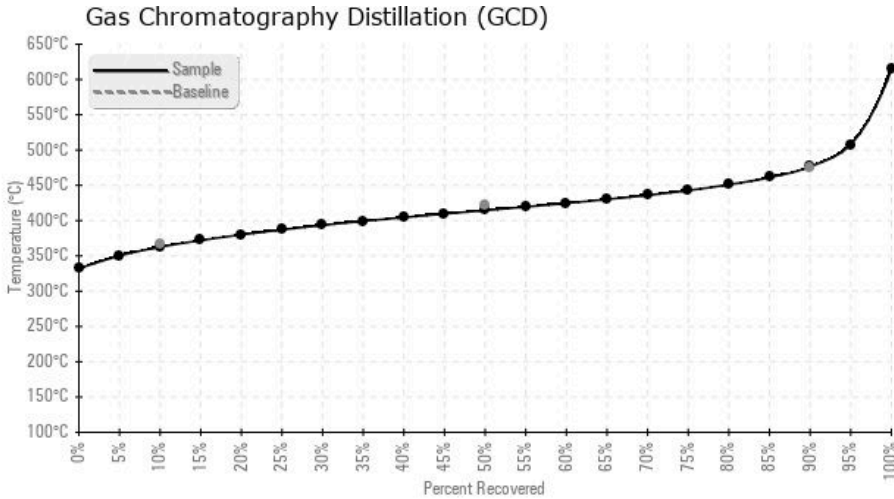
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
08/20/14	08/28/14	60m	MCN OIL PUMP DISCHAR	435 / 224	17.2	30.7	0.043	0.092	685 / 363	778 / 415	890 / 476	0.53
03/25/14	04/02/14	27m	PRV VENT NEAR TCS VP	419 / 215	14.4	31.0	0.02	0.047	689 / 365	798 / 426	892 / 478	2.79
06/21/12	06/25/12		NA	448 / 231	29	30.9	0.01	0.024	696 / 369	796 / 424	893 / 478	2.487
10/06/11	10/10/11		DCS COLUMN SAMPLE LI	397 / 203	17	31.1	0.07	0.064	694 / 368	795 / 424	890 / 476	2.673
04/12/11	04/14/11		ENDLOOP	401 / 205	35	31.1	0.02	0.025	697 / 369	796 / 424	891 / 477	2.357
04/11/11	04/12/11		END LOOP	426 / 219	48	30.6	0.02	0.017	697 / 369	797 / 425	892 / 478	2.569
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
08/20/14	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	14	0
03/25/14	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	14	0
06/21/12	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	1	0	10	0
10/06/11	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	11	0
04/12/11	0	0	0	0	0	0	1	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	18	0
04/11/11	2	0	0	1	0	1	1	22	0	0	2	8	11	0	0	0	0	0	0	1	22	0	21	9
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

03/25/14	Silicon remains very low (1 ppm). It has been 20 months since the last sample on this system. Please try to sample every 9 months or so at least. Other properties tested show the oil is healthy and normal when compared to fresh Callfo AF. Keep up the good work.
06/21/12	
10/06/11	
04/12/11	
04/11/11	