

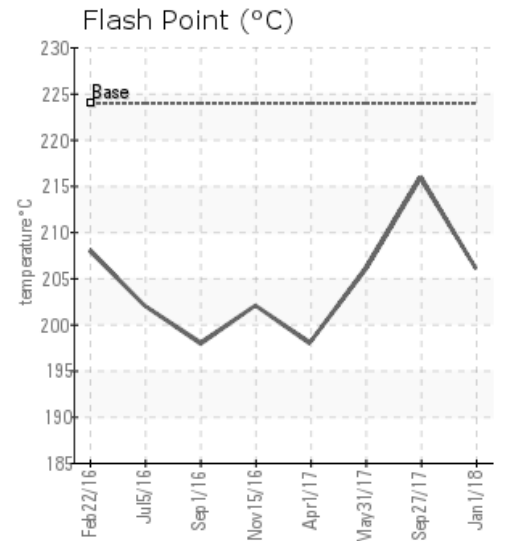
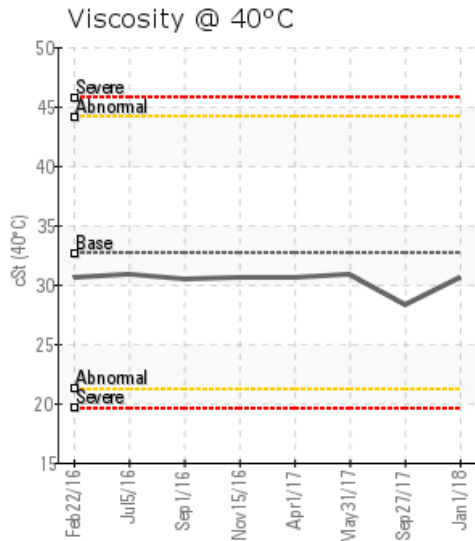
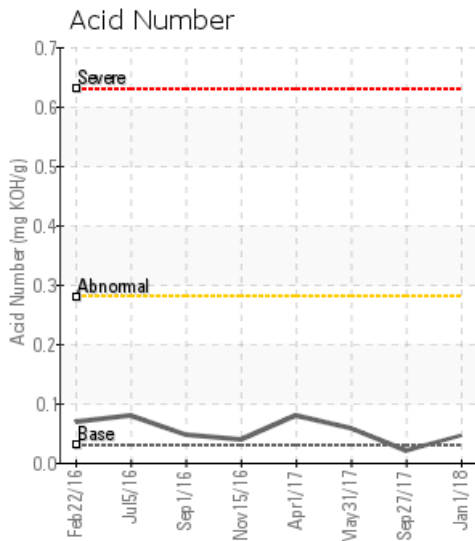
SILANE 3.0 DISTILLATION

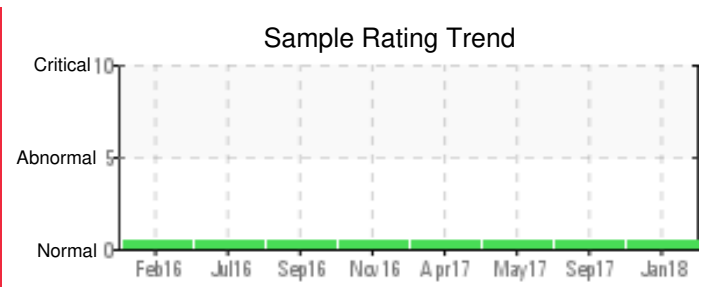
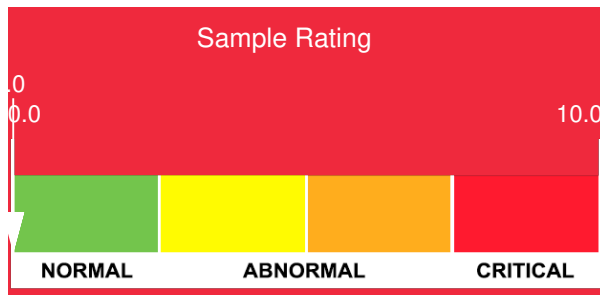
Customer: PTRHTF10093	System Information	Sample Information
REC GROUP 3322 ROAD N N.E. MOSES LAKE, WA 98837 USA Attn: Loren Poulson Tel: E-Mail: loren.poulson@recsilicon.com	System Volume: 50000 gal Bulk Operating Temp: 420F / 216C Heating Source: Blanket: Fluid: PETRO CANADA CALFLO AF Make: COEN	Lab No: 02193415 Analyst: Ron LeBlanc Sample Date: 01/01/18 Received Date: 01/18/18 Completed: 01/23/18 To discuss this report contact Ron LeBlanc at (541)967-6499

Recommendation: Sample appears normal. Silicon level is acceptable. Resample at normal interval.

Comments:

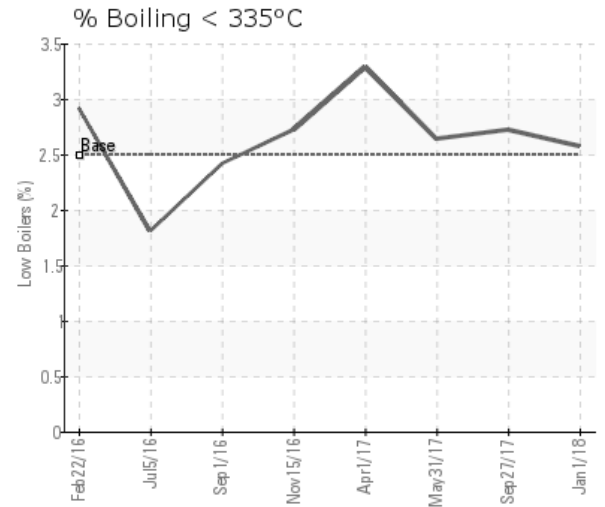
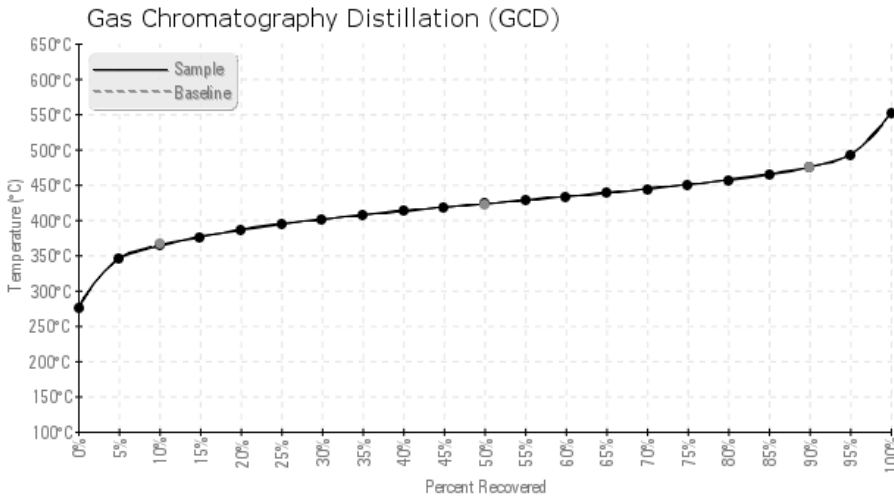
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
01/01/18	01/18/18	107m		403 / 206	1.7	30.6	0.046	0.100	686 / 363	793 / 423	888 / 475	2.57
09/27/17	09/28/17	102m		421 / 216	12.0	28.3	0.02	0.052	688 / 364	795 / 424	891 / 477	2.72
05/31/17	06/05/17	98m	DISTO HOT OIL STATIO	403 / 206	111.1	30.9	0.059	0.161	690 / 366	800 / 427	900 / 482	2.64
04/01/17	04/06/17	97m	DISTO H/O STATION	388 / 198	6.2	30.6	0.08	0.067	686 / 363	797 / 425	902 / 483	3.29
11/15/16	11/21/16	92m	DISTO HOT OIL SAMPLE	396 / 202	14.0	30.6	0.039	0.026	690 / 365	800 / 427	897 / 480	2.72
09/01/16	09/16/16	92m	DISTO HOT OIL STATN	388 / 198	6.5	30.5	0.047	0.047	692 / 367	799 / 426	895 / 480	2.42
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	
01/01/18	6	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	25	0	
09/27/17	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	22	0
05/31/17	14	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	34	1
04/01/17	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	14	0
11/15/16	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	12	0
09/01/16	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	13	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

09/27/17	Silicon dropped from previous sample. Phosphorous dropped slightly as well. Sodium increased slightly. Otherwise, the sample looks normal.
05/31/17	Sample appears normal. Resample in 3 months.
04/01/17	Sample appears normal. Resample in 6 months.
11/15/16	Sample appears normal. Resample in 3 months.
09/01/16	Sample appears normal. Resample at normal interval.

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