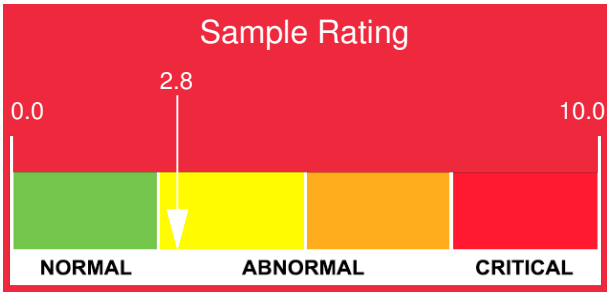
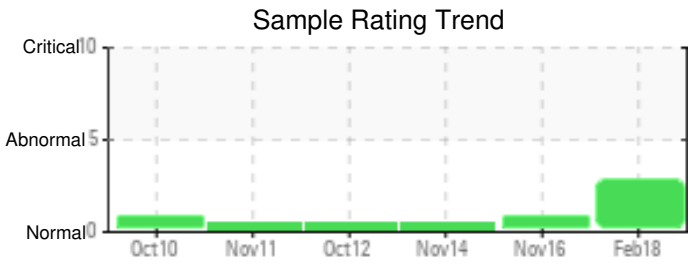




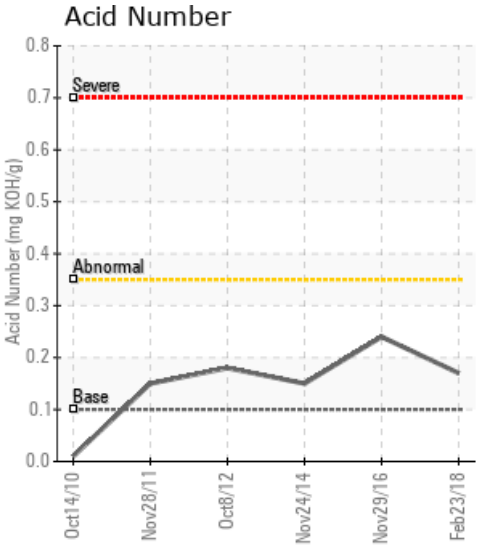
YONG SHUN PU U-1 U-2

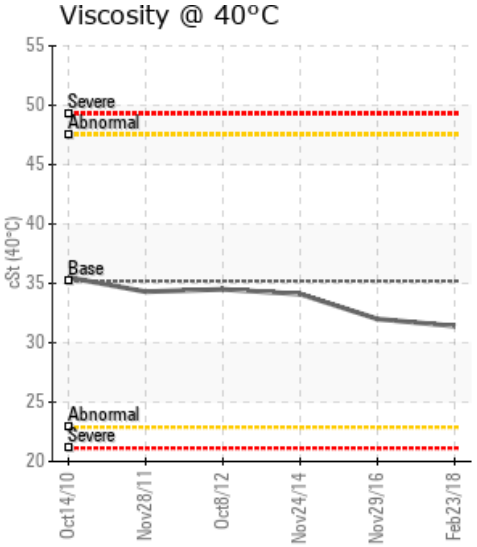
Customer: PTRHTF60007	System Information	Sample Information
CANADIAN RESOURCES INC 2F 71 CHONG CHING NORTH ROAD S C 3 TAIPEI, TAIWAN, PROVINC Attn: HUGO CHENG Tel: (886)225-853509 E-Mail: roychen1018@hotmail.com	System Volume: 6560 ltr Bulk Operating Temp: 419F / 215C Heating Source: Blanket: Fluid: PETRO CANADA CALFLO HTF Make:	Lab No: 02202457 Analyst: Yutong Gao Sample Date: 02/23/18 Received Date: 03/07/18 Completed: 03/10/18 To discuss this report contact Yutong Gao at (403)873-1876

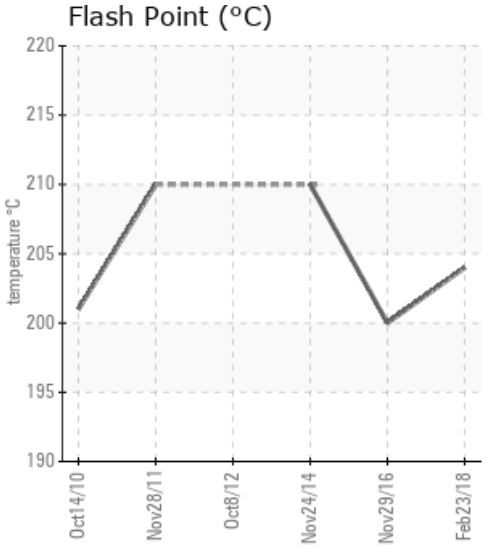
Recommendation: The current fluid has normal viscosity, flash point, TAN and solid contents. The 10% and 90% distillation points are a littler lower than the fresh fluid, but is suitable for further operation. Please take one sample in 12 months to monitor the conditions. The fluid hours are not reported, which definitely limit our interpretation. Please inform Yutong Gao at Petro-Canada for the detailed fluid hours.

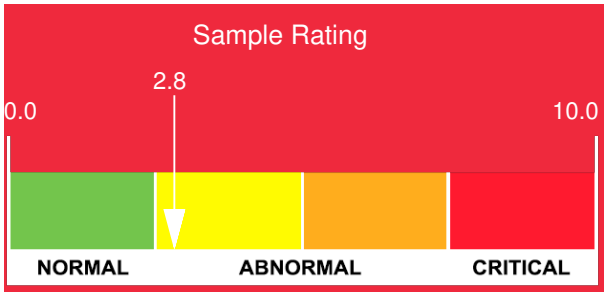
Comments:

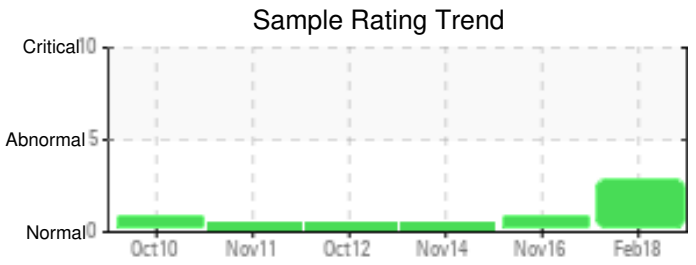
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
02/23/18	03/07/18	0h		399 / 204	13.8	31.4	0.170	0.041	654 / 346	769 / 410	873 / 467	3.41
11/29/16	12/08/16	0h		392 / 200	69.0	32.0	0.24	0.073	670 / 355	806 / 430	923 / 495	4.39
11/24/14	11/28/14	0h	U-1, U-2	410 / 210	0.00	34.1	0.15	0.175	694 / 368	808 / 431	915 / 490	2.94
10/08/12	10/15/12		NA		29	34.5	0.18	0.109	692 / 366	802 / 428	911 / 488	2.85
11/28/11	12/09/11		NA	410 / 210	22	34.3	0.15	0.056	691 / 366	802 / 428	905 / 485	3.12
10/14/10	10/21/10			394 / 201	38	35.5	0.01	0.073	696 / 369	802 / 428	902 / 484	2.38
Baseline Data				448 / 231		35.20	.1		712 / 378	810 / 432	910 / 488	1.75





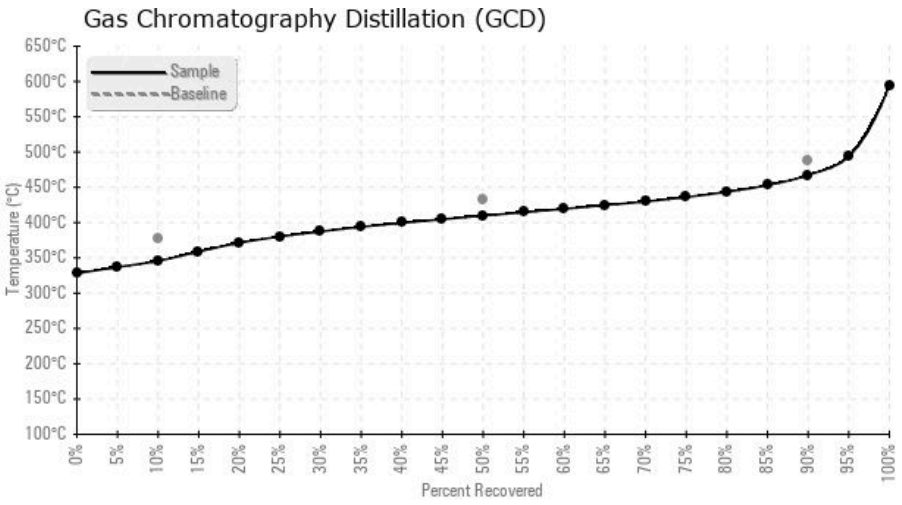


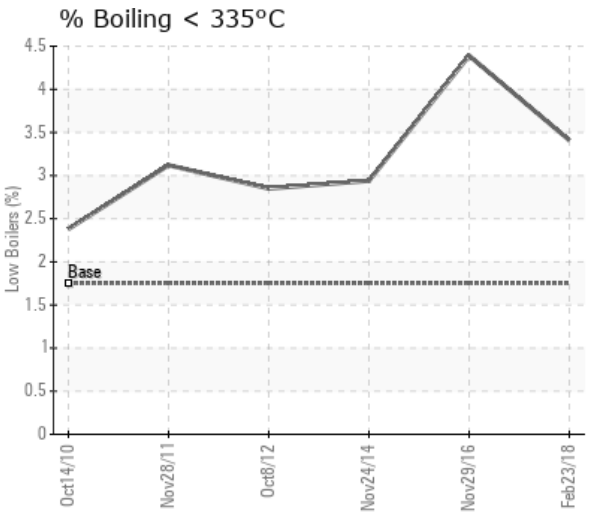




Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
02/23/18	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
11/29/16	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	0
11/24/14	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	85	0
10/08/12	2	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7	0	114	6
11/28/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	100	1
10/14/10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	114	0
Baseline Data			0	0						0			0	0					0				280	

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





Historical Comments

11/29/16	The current fluid has adequate viscosity, flash point, acid number, distillation points, water and the solid content. The fluid is OK for continual run and please take a sample in 12 months to monitor the conditions.
11/24/14	The current fluid has normal viscosity, TAN, GCD points, flash point and particle level. It is suitable for futher use and take one sample in 12 months to monitor the conditions.
10/08/12	We would suggest to replace 25-30% of this oil to prolong its life by a few years. The Total Acid Number is rising hence the sweetening recommendation.
11/28/11	The results indicate the oil appears to be in great condition. Nothing abnormal to point out. The Calflo HTF appears to be suitable for further use. Please contact your technical representative if operational issues that may be related to the fluid are experienced. Re-sample in about 6 to 9 months.
10/14/10	The Calflo HTF appears to be in good condition and suitable for further use. Please re-sample in 9-12 months to monitor