

## [ATHABASCA OIL CORP / 05-27-078-10W4M] L3 (PAD C) LIESMER

**Customer: PTRHTF20133**  
 ATHABASCA OIL CORP.  
 LEISMER DEMONSTRATION PLANT  
 LSD2-79-10-W4M  
 NEAR CONKLIN, AB Canada  
 Attn: George Ball  
 Tel: (587)233-1312  
 E-Mail: gball@atha.com

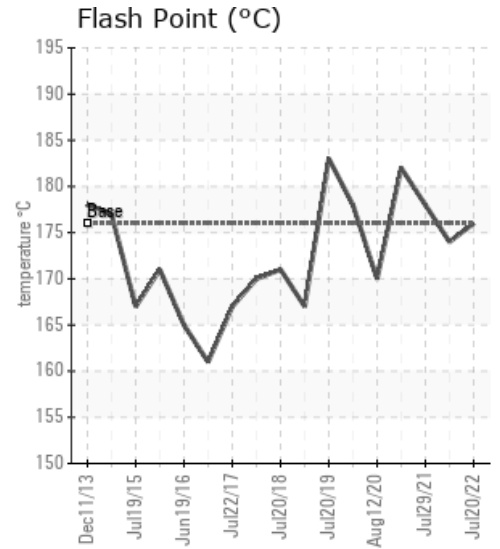
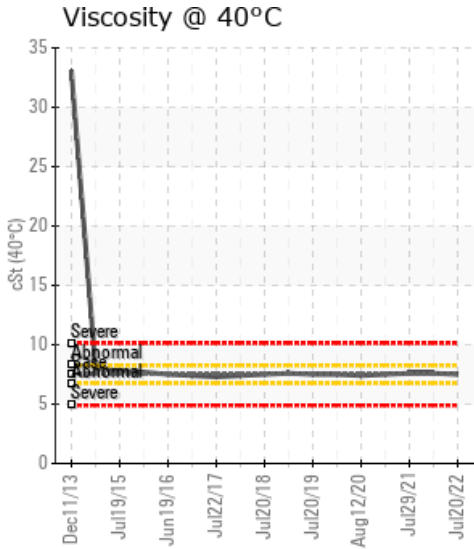
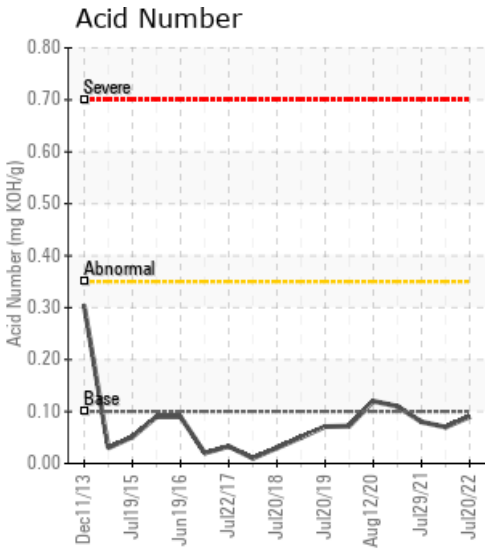
**System Information**  
 System Volume: 8000 ltr  
 Bulk Operating Temp: 212F / 100C  
 Heating Source:  
 Blanket:  
 Fluid: PETRO CANADA CALFLO LT  
 Make: TORNADO TECHNOLOGIES

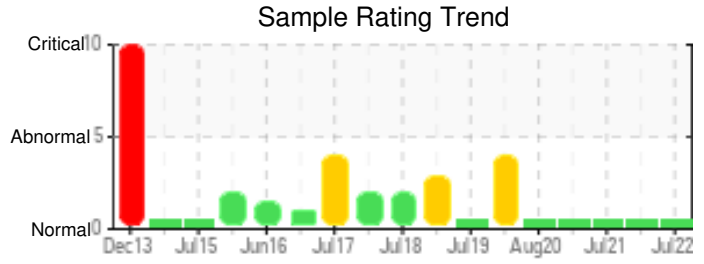
**Sample Information**  
 Lab No: 02506466  
 Analyst: Terry Veenstra  
 Sample Date: 07/20/22  
 Received Date: 08/22/22  
 Completed: 08/24/22  
 Terry Veenstra  
 terry.veenstra@HFSinclair.com

Recommendation: Results Normal. No action needed at this time. Resample at next scheduled date.

Comments:

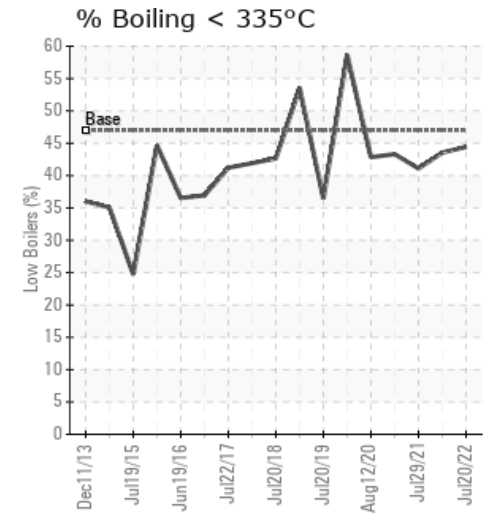
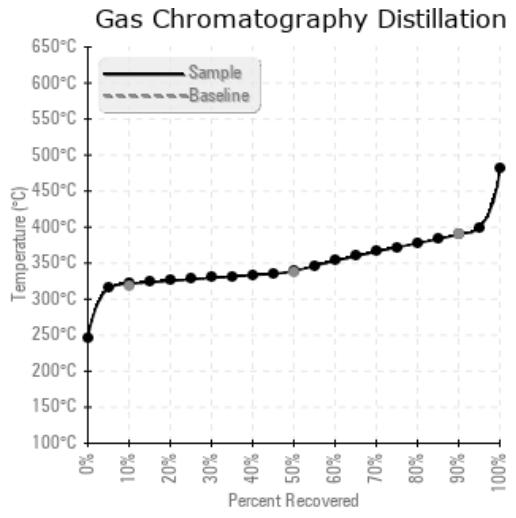
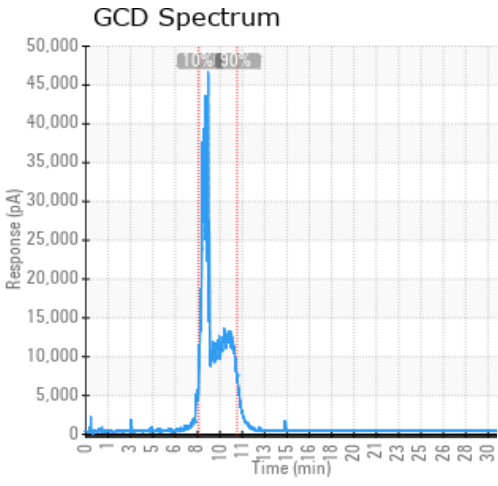
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
07/20/22	08/22/22	9.0y	05-27-078-10W4M L3 C	349 / 176	0.00	7.5	0.09	0.047	610 / 321	642 / 339	734 / 390	44.43
01/21/22	02/04/22	0.0y	system header	345 / 174	5.1	7.6	0.07	0.015	610 / 321	644 / 340	734 / 390	43.55
07/29/21	08/10/21	0.0y	pit 12c 0285	352 / 178	13.7	7.6	0.08	0.037	613 / 323	642 / 339	732 / 389	41.08
02/03/21	02/24/21	0.0y	bottom of tracer tre	360 / 182	27.0	7.5	0.11	0.125	611 / 322	643 / 339	737 / 391	43.31
08/12/20	08/31/20	0.0y	OT0285	338 / 170	6.3	7.4	0.12	0.043	612 / 322	643 / 340	735 / 391	42.84
<b>Baseline Data</b>				349 / 176		7.52	0.1		604 / 318	640 / 338	734 / 390	47.0





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
07/20/22	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	83	0
01/21/22	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85	0
07/29/21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88	0
02/03/21	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	82	0
08/12/20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87	0
Baseline Data			0	0						0			0	0				0	0				270	

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



Historical Comments	
01/21/22	Fluid is in good condition and suitable for continued use. Resample in 6 months.
07/29/21	Fluid is in good condition and is suitable for continued use. Resample in 6 months.
02/03/21	Fluid is in good condition and good for continued use. Resample in 6 months
08/12/20	Results Normal. No action needed at this time. Resample at next scheduled date.

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. Petro-Canada is a division of HollyFrontier Corporation.