

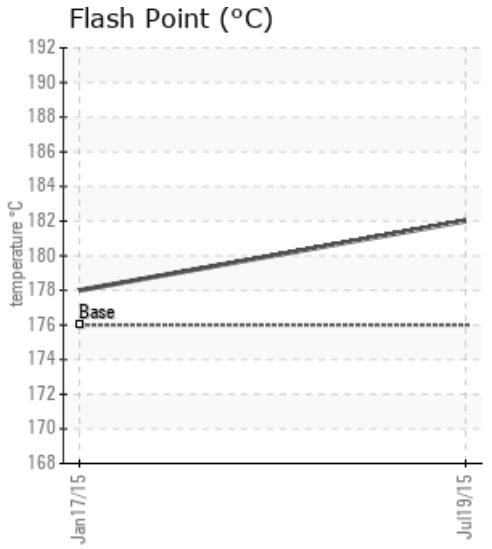
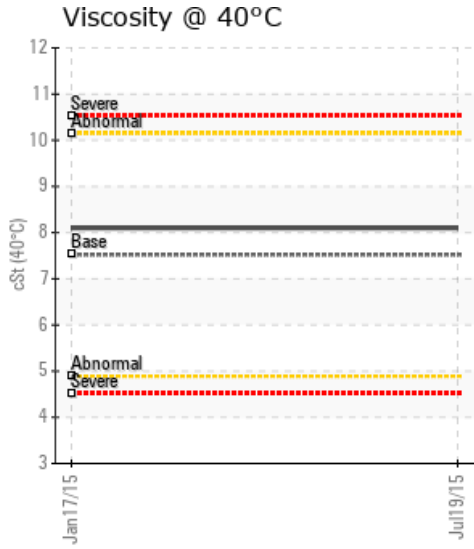
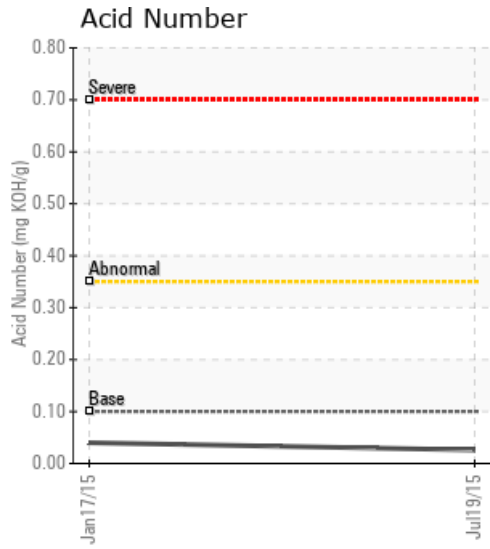
## [ATHABASCA OIL CORP / LSD 2-79-10-W4M] WELLPAD 5

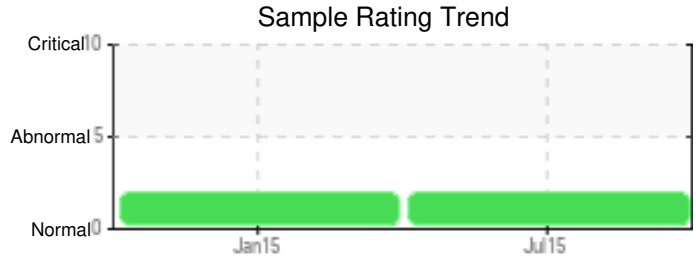
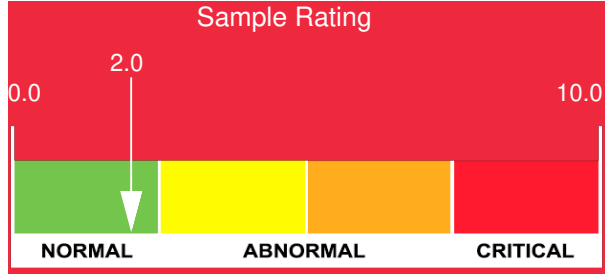
Customer: PTRHTF20133	System Information	Sample Information
ATHABASCA OIL CORP. LEISMER DEMONSTRATION PLANT LSD2-79-10-W4M NEAR CONKLIN, AB Canada Attn: George Ball Tel: (587)233-1312 E-Mail: gball@atha.com	System Volume: 0 gal Bulk Operating Temp: 248F / 120C Heating Source: Blanket: Fluid: PETRO CANADA CALFLO LT Make:	Lab No: 02011820 Analyst: Peter Harteveld Sample Date: 07/19/15 Received Date: 07/31/15 Completed: 08/10/15 Peter Harteveld peter.harteveld@HFSinclair.com

Recommendation: The fluid is in good condition and suitable for further use. The 50% and 90% GCD temperatures are high. Water content has increased. This is not alarming but it is advised to boil-off the water by venting. Please re-sample in 6 months.

Comments: (GCD) 90% Distillation Point is abnormally high. (GCD) 50% 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	%
07/19/15	07/31/15	10.0m		360 / 182	118.5	8.1	0.026	0.041	622 / 328	674 / 357	764 / 406	23.86
01/17/15	01/26/15	4.5m	FLOW LINE	352 / 178	27.0	8.1	0.04	0.042	617 / 325	666 / 352	782 / 416	28.34
Baseline Data				349 / 176		7.52	0.1		604 / 318	640 / 338	734 / 390	35.0

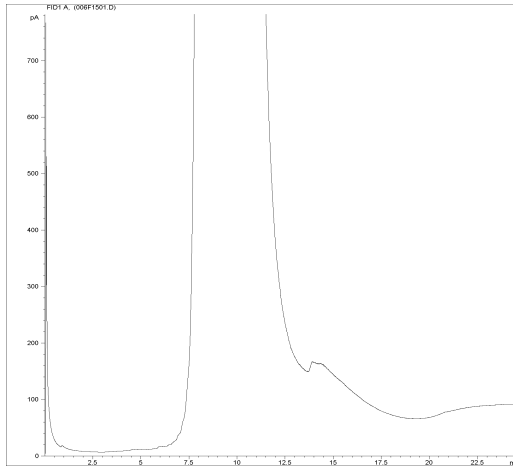




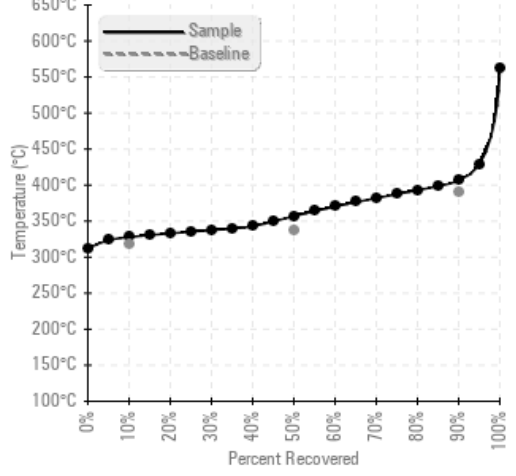
Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
07/19/15	59	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	1	0	4	0	4	0	268	0
01/17/15	80	0	0	0	0	0	1	0	0	0	6	0	0	0	0	0	2	0	7	0	3	0	259	0
Baseline Data			0	0						0		0	0						0				270	

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

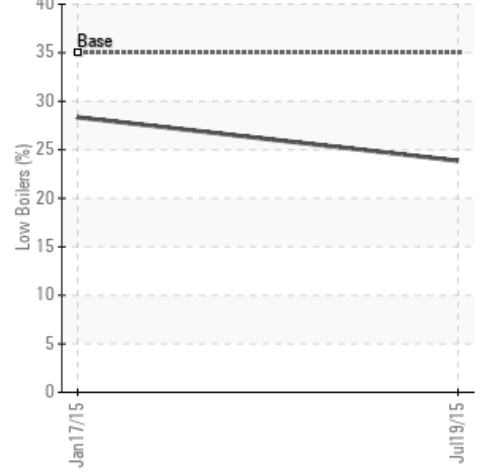
GCD Spectrum



Gas Chromatography Distillation



% Boiling < 335°C



Historical Comments

01/17/15	The fluid is in good condition and suitable for further use. The distillation curve indicates ingress of a heavier fluid possibly left behind after flushing/commissioning of the system. Please re-sample in 6 months. (GCD) 90% Distillation Point is severely high.
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