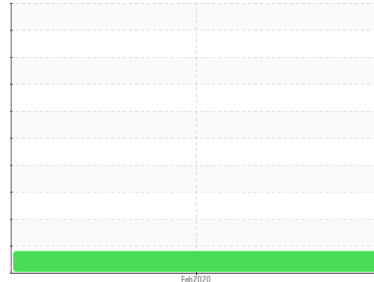


OIL ANALYSIS REPORT



Area
(123456789) Coal Yard
Machine Id
LIEBHERR A312 123456-1234
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX MV ARCTIC 15 (75 LTR)

Sample Rating Trend



OFF SPEC



DIAGNOSIS

▲ Recommendation

Resample at the next service interval to monitor. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MOB 2 test kits, this testkit includes Particle Count to determine the ISO cleanliness of the fluid.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the component(unconfirmed).

▲ Fluid Condition

Viscosity of sample indicates oil is within ISO 32 range, advise investigate. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PC0010608	---	---
Sample Date	Client Info		01 Feb 2020	---	---
Machine Age	hrs	Client Info	18500	---	---
Oil Age	hrs	Client Info	1180	---	---
Oil Changed	Client Info		Not Chngd	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >70	0	---	---
Chromium	ppm	ASTM D5185(m) >5	0	---	---
Nickel	ppm	ASTM D5185(m) >2	0	---	---
Titanium	ppm	ASTM D5185(m)	0	---	---
Silver	ppm	ASTM D5185(m)	0	---	---
Aluminum	ppm	ASTM D5185(m) >2	0	---	---
Lead	ppm	ASTM D5185(m) >3	<1	---	---
Copper	ppm	ASTM D5185(m) >10	0	---	---
Tin	ppm	ASTM D5185(m) >2	0	---	---
Antimony	ppm	ASTM D5185(m) >3	0	---	---
Vanadium	ppm	ASTM D5185(m)	0	---	---
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	0	---	---

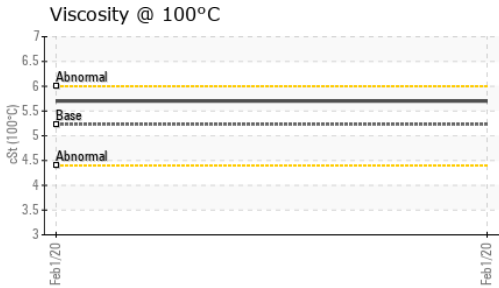
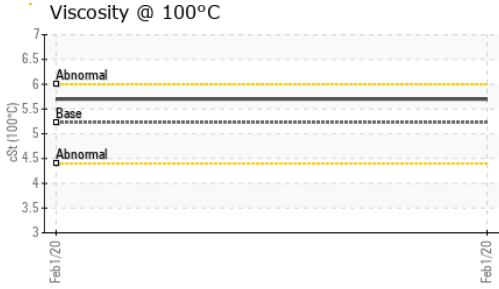
ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	0	---	---
Barium	ppm	ASTM D5185(m) 0	0	---	---
Molybdenum	ppm	ASTM D5185(m) 0	0	---	---
Manganese	ppm	ASTM D5185(m) 0	0	---	---
Magnesium	ppm	ASTM D5185(m) 0	<1	---	---
Calcium	ppm	ASTM D5185(m) 50	56	---	---
Phosphorus	ppm	ASTM D5185(m) 330	369	---	---
Zinc	ppm	ASTM D5185(m) 430	469	---	---
Sulfur	ppm	ASTM D5185(m) 760	852	---	---
Lithium	ppm	ASTM D5185(m)	0	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >10	<1	---	---
Sodium	ppm	ASTM D5185(m)	0	---	---
Potassium	ppm	ASTM D5185(m) >20	0	---	---

OIL ANALYSIS REPORT

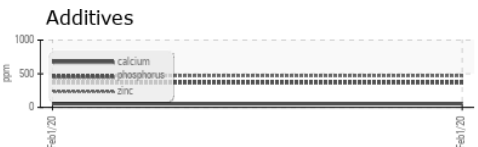
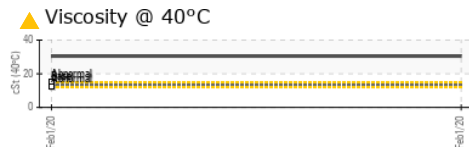
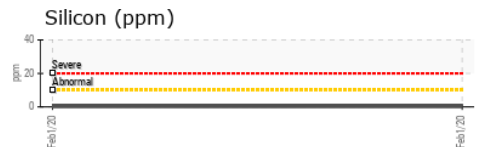
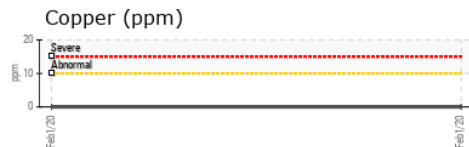
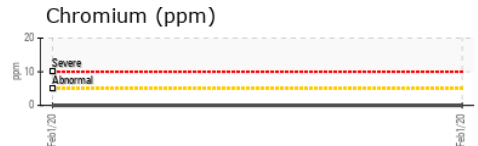
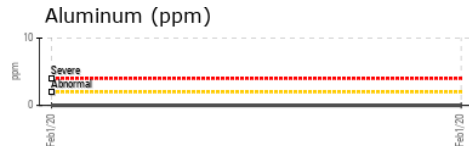


VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.1	NEG	---	---
Free Water	scalar	Visual*		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	13.6	▲ 30.5	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	5.23	5.7	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	394	▲ 129	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0010608 **Received** : 02 Feb 2020
Lab Number : 02279779 **Diagnosed** : 03 Feb 2020
Unique Number : 4851018 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: KV100, VI)

ABC Manufacturing
 555 NORTH SERVICE ROAD EAST
 Detroit, ON
 US 76100
 Contact: Jim Smith
 jim.smith@abcmanufacturing.com
 T: (311)555-1212
 F: (311)555-1313

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.