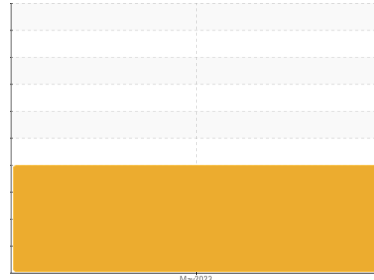




OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Area
Royal Mat Inc - 888043
 Machine Id
XB080
 Component
Hydraulic System
 Fluid
AW HYDRAULIC OIL ISO 68 (--- GAL)

DIAGNOSIS

▲ Recommendation

The sample submitted is wet and 8 times dirtier than the ISO dirt count recommendation of 19/16/14.

▲ Contamination

Water and ppm water contamination levels are abnormal. Particles >6µm and oil cleanliness are abnormally high.

● Fluid Condition

Molybdenum ppm levels are notably high. Boron ppm levels are notably high.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Department	Client Info		Sales	---	---
Sample From	Client Info		Machine	---	---
Production Stage	Client Info		Initial	---	---
Sent to WC	Client Info		03/21/2024	---	---
Sample Number	Client Info		E30001735	---	---
Sample Date	Client Info		04 May 2023	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			ABNORMAL	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<1	---
Chromium	ppm	ASTM D5185(m)	>20	0	---
Nickel	ppm	ASTM D5185(m)	>20	0	---
Titanium	ppm	ASTM D5185(m)		0	---
Silver	ppm	ASTM D5185(m)		0	---
Aluminum	ppm	ASTM D5185(m)	>20	<1	---
Lead	ppm	ASTM D5185(m)	>20	0	---
Copper	ppm	ASTM D5185(m)	>20	<1	---
Tin	ppm	ASTM D5185(m)	>20	0	---
Antimony	ppm	ASTM D5185(m)		0	---
Vanadium	ppm	ASTM D5185(m)		0	---
Beryllium	ppm	ASTM D5185(m)		0	---
Cadmium	ppm	ASTM D5185(m)		0	---

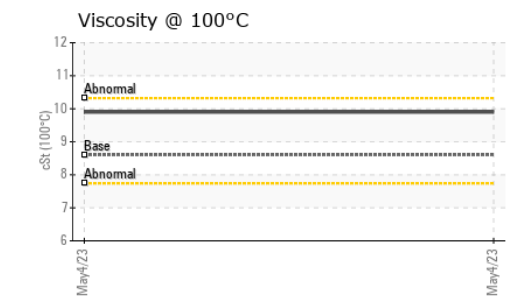
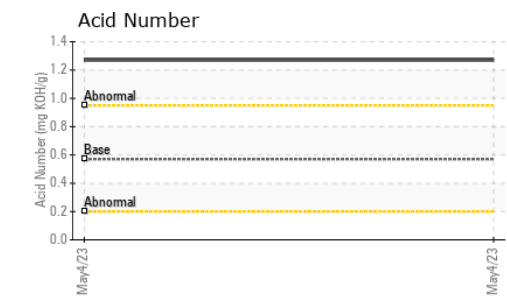
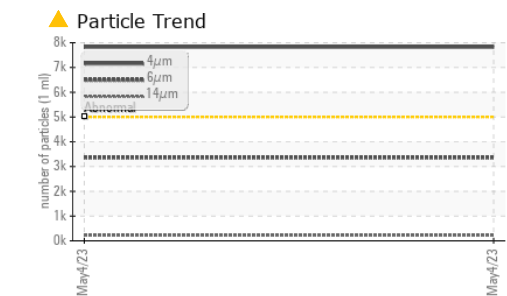
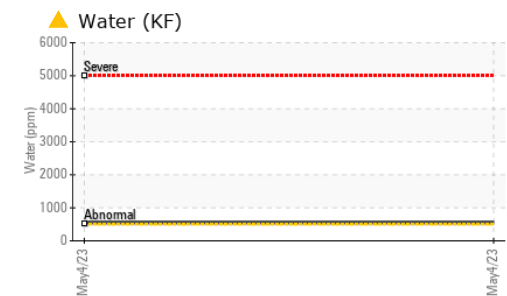
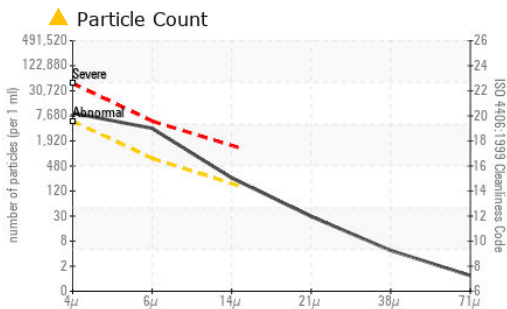
ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	5	53	---
Barium	ppm	ASTM D5185(m)	5	0	---
Molybdenum	ppm	ASTM D5185(m)	5	48	---
Manganese	ppm	ASTM D5185(m)		0	---
Magnesium	ppm	ASTM D5185(m)	25	633	---
Calcium	ppm	ASTM D5185(m)	200	968	---
Phosphorus	ppm	ASTM D5185(m)	300	719	---
Zinc	ppm	ASTM D5185(m)	370	765	---
Sulfur	ppm	ASTM D5185(m)	2500	3271	---
Lithium	ppm	ASTM D5185(m)		<1	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	2	---
Sodium	ppm	ASTM D5185(m)		2	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---
Water	%	ASTM D6304*	>0.05	▲ 0.054	---
ppm Water	ppm	ASTM D6304*	>500	▲ 548	---

OIL ANALYSIS REPORT



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : E30001735
Lab Number : 02624261
Unique Number : 5749380
Test Package : IND 2 (Additional Tests: KF, KV100, TAN MAN, VI)

Received : 25 Mar 2024
Tested : 26 Mar 2024
Diagnosed : 27 Mar 2024 - Tatiana Sorkina

To discuss this sample report, contact Customer Service at 1-905-372-2251.
 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.

Environmental 360 Solutions Ltd.
 640 Victoria Street
 Cobourg, ON
 CA K9A 5H5
 Contact: Tatiana Sorkina
 tsorkina@e360s.ca
 T: (800)263-3939
 F: (905)373-4950

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	● 7826	---	---
Particles >6µm	ASTM D7647	>640	▲ 3362	---	---
Particles >14µm	ASTM D7647	>160	● 218	---	---
Particles >21µm	ASTM D7647	>40	26	---	---
Particles >38µm	ASTM D7647	>10	4	---	---
Particles >71µm	ASTM D7647	>3	1	---	---
Oil Cleanliness	ISO 4406 (c)	>19/16/14	▲ 20/19/15	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	1.27	---

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*	>0.05	NEG	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	68	63.3	---
Visc @ 100°C	cSt	ASTM D7279(m)	8.6	9.9	---
Viscosity Index (VI)	Scale	ASTM D2270*	96	140	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------

Color				no image	no image
Bottom				no image	no image