



OIL ANALYSIS REPORT

Sample Rating Trend

WATER



Area
Mako Plastics - 888067
 Machine Id
AG235
 Component
Hydraulic System
 Fluid
AW HYDRAULIC OIL ISO 46 (--- LTR)

DIAGNOSIS

Recommendation

This is a baseline read-out on the submitted sample.

Wear

Iron ppm levels are noted.

Contamination

ppm Water and water and water contamination levels are abnormal. Particles >6µm are abnormally high. Particles >4µm are abnormally high. Oil Cleanliness are abnormally high. Particles >14µm are abnormally high. Particles >21µm are abnormally high. Particles >71µm are notably high. Particles >38µm are notably high.

Fluid Condition

Visc @ 100°C is abnormally low. Viscosity Index (VI) is abnormally low.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Machine ID	Client Info		Tote 3	---	---
Department	Client Info		Sales	---	---
Sample From	Client Info		Tote	---	---
Production Stage	Client Info		Initial	---	---
Sent to WC	Client Info		01/15/2024	---	---
Sample Number	Client Info		E30001149	---	---
Sample Date	Client Info		11 Jan 2024	---	---
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	17	---	---
Chromium	ppm	ASTM D5185(m) >20	<1	---	---
Nickel	ppm	ASTM D5185(m) >20	<1	---	---
Titanium	ppm	ASTM D5185(m)	0	---	---
Silver	ppm	ASTM D5185(m)	0	---	---
Aluminum	ppm	ASTM D5185(m) >20	2	---	---
Lead	ppm	ASTM D5185(m) >20	2	---	---
Copper	ppm	ASTM D5185(m) >20	9	---	---
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	---	---

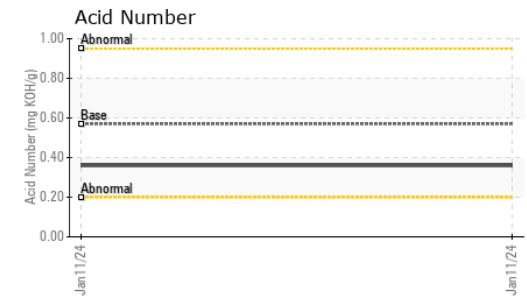
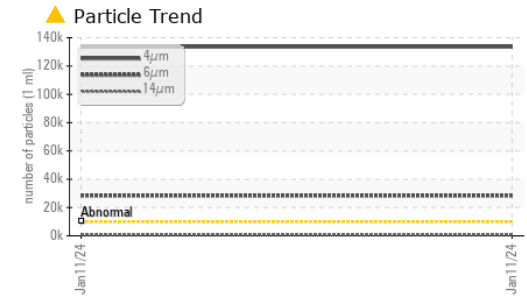
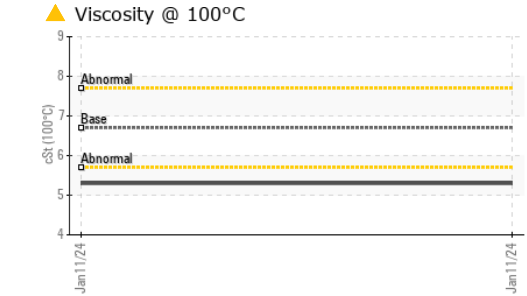
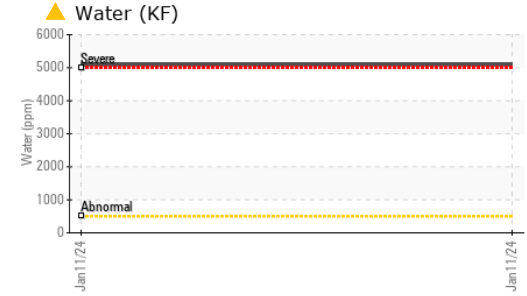
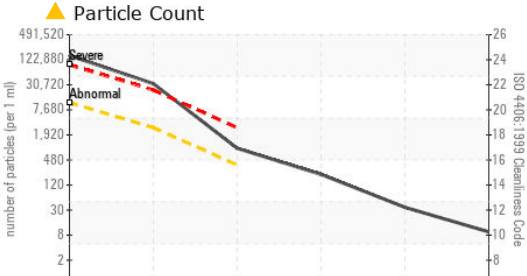
ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 5	1	---	---
Barium	ppm	ASTM D5185(m) 5	0	---	---
Molybdenum	ppm	ASTM D5185(m) 5	0	---	---
Manganese	ppm	ASTM D5185(m)	0	---	---
Magnesium	ppm	ASTM D5185(m) 25	2	---	---
Calcium	ppm	ASTM D5185(m) 200	36	---	---
Phosphorus	ppm	ASTM D5185(m) 300	333	---	---
Zinc	ppm	ASTM D5185(m) 370	331	---	---
Sulfur	ppm	ASTM D5185(m) 2500	1106	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	7	---	---
Sodium	ppm	ASTM D5185(m)	2	---	---
Potassium	ppm	ASTM D5185(m) >20	1	---	---
Water	%	ASTM D6304* >0.05	▲ 0.509	---	---
ppm Water	ppm	ASTM D6304* >500	▲ 5091	---	---

OIL ANALYSIS REPORT



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ 133527	---	---
Particles >6µm	ASTM D7647	>2500	▲ 28403	---	---
Particles >14µm	ASTM D7647	>320	▲ 804	---	---
Particles >21µm	ASTM D7647	>80	▲ 190	---	---
Particles >38µm	ASTM D7647	>20	▲ 31	---	---
Particles >71µm	ASTM D7647	>4	▲ 8	---	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ 24/22/17	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*	0.57	0.36	---	---

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	▲ WGOIL	---	---
Odor	scalar Visual*	NORML	NORML	---	---
Emulsified Water	scalar Visual*	>0.05	▲ .5%	---	---
Free Water	scalar Visual*		▲ 5%	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D7279(m)	46	43.7	---	---
Visc @ 100°C	cSt ASTM D7279(m)	6.7	▲ 5.3	---	---
Viscosity Index (VI)	Scale ASTM D2270*	97	▲ 12	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color		no image	no image
Bottom		no image	no image



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : E30001149 **Received** : 17 Jan 2024
Lab Number : **02609401** **Diagnosed** : 19 Jan 2024
Unique Number : 5710487 **Diagnostician** : Tatiana Sorkina
Test Package : IND 2 (Additional Tests: KF, KV100, VI)

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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.