



OIL ANALYSIS REPORT

Sample Rating Trend

WATER



Area
Inland Iron and Metal - 888041
 Machine Id
AG231M
 Component
Hydraulic System
 Fluid
AW HYDRAULIC OIL ISO 46 (--- LTR)

DIAGNOSIS

- Recommendation**
 This is a baseline read-out on the submitted sample.
- Wear**
 Aluminum, copper and iron ppm levels are noted.
- Contamination**
 Water and ppm water contamination levels are abnormal. Particles >4µm are abnormally high. Particles >6µm and oil cleanliness are abnormally high. Silicon ppm levels are notably high.
- Fluid Condition**
 {not applicable}

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Machine ID	Client Info		Mixture	---	---
Department	Client Info		Sales	---	---
Sample From	Client Info		Machine	---	---
Production Stage	Client Info		Initial	---	---
Sent to WC	Client Info		01/15/2024	---	---
Sample Number	Client Info		E30001145	---	---
Sample Date	Client Info		15 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	▲ 28	---
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	▲ 5	---
Lead	ppm	ASTM D5185(m)	>20	10	---
Copper	ppm	ASTM D5185(m)	>20	▲ 12	---
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	---

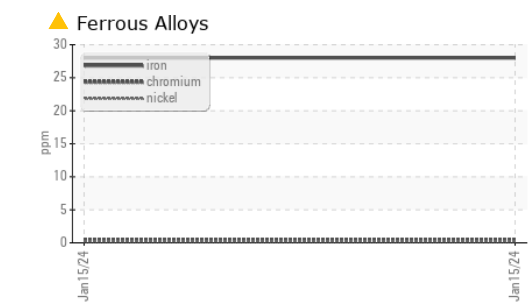
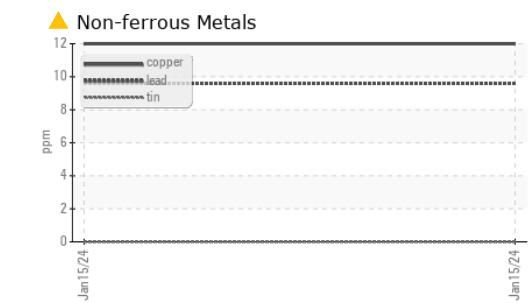
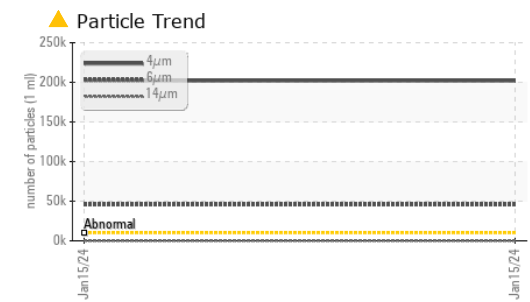
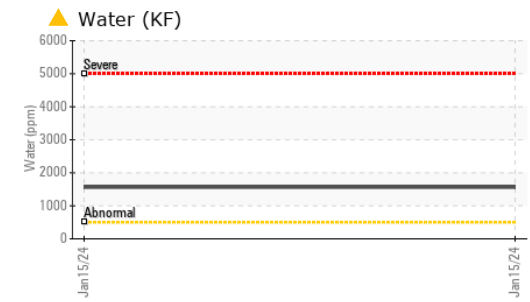
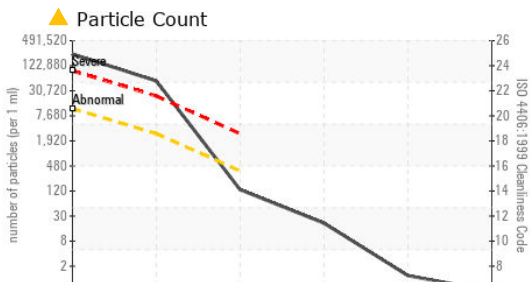
ADDITIVES

	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	5	---
Calcium	ppm	ASTM D5185(m)	200	38	---
Phosphorus	ppm	ASTM D5185(m)	300	336	---
Zinc	ppm	ASTM D5185(m)	370	321	---
Sulfur	ppm	ASTM D5185(m)	2500	1560	---
Lithium	ppm	ASTM D5185(m)		<1	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	▲ 18	---
Sodium	ppm	ASTM D5185(m)		<1	---
Potassium	ppm	ASTM D5185(m)	>20	3	---
Water	%	ASTM D6304*	>0.05	▲ 0.156	---
ppm Water	ppm	ASTM D6304*	>500	▲ 1564	---

OIL ANALYSIS REPORT



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : E30001145 **Received** : 17 Jan 2024
Lab Number : 02609404 **Diagnosed** : 19 Jan 2024
Unique Number : 5710490 **Diagnostician** : Tatiana Sorkina
Test Package : IND 2 (Additional Tests: KF, KV100, VI)

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

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.

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ 202006	---	---
Particles >6µm	ASTM D7647	>2500	▲ 45706	---	---
Particles >14µm	ASTM D7647	>320	114	---	---
Particles >21µm	ASTM D7647	>80	18	---	---
Particles >38µm	ASTM D7647	>20	1	---	---
Particles >71µm	ASTM D7647	>4	0	---	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ 25/23/14	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*	0.57	0.34	---	---

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	HAZY	---	---
Odor	scalar Visual*	NORML	NORML	---	---
Emulsified Water	scalar Visual*	>0.05	.2%	---	---
Free Water	scalar Visual*		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D7279(m)	46	45.9	---	---
Visc @ 100°C	cSt ASTM D7279(m)	6.7	8	---	---
Viscosity Index (VI)	Scale ASTM D2270*	97	146	---	---

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