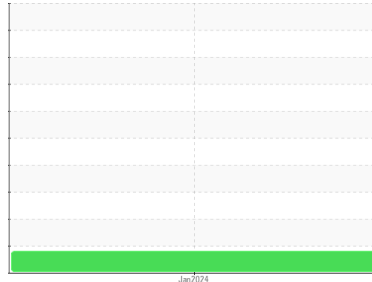




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
Chem-Ecol
 Machine Id
A2401057
 Component
Hydraulic System
 Fluid
CHEM-ECOL GREENLUBE 46 (--- GAL)

DIAGNOSIS

- ▲ Recommendation**
This is a baseline read-out on the submitted sample.
- ▲ Wear**
Copper and iron ppm levels are noted.
- Contamination**
{not applicable}
- Fluid Condition**
Visc @ 40°C is notably high.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Batch #	Client Info			2970-A	---	---
Department	Client Info			Production	---	---
Sample From	Client Info			Machine	---	---
Production Stage	Client Info			Final	---	---
Sent to WC	Client Info			01/09/2024	---	---
Sample Number	Client Info			E30001134	---	---
Sample Date	Client Info			09 Jan 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Oil Changed	Client Info			N/A	---	---
Sample Status				ATTENTION	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	▲ 19	---	---
Chromium	ppm	ASTM D5185(m)	>20	0	---	---
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	1	---	---
Lead	ppm	ASTM D5185(m)	>20	1	---	---
Copper	ppm	ASTM D5185(m)	>20	13	---	---
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)		0	---	---
Barium	ppm	ASTM D5185(m)		0	---	---
Molybdenum	ppm	ASTM D5185(m)		0	---	---
Manganese	ppm	ASTM D5185(m)		0	---	---
Magnesium	ppm	ASTM D5185(m)		57	---	---
Calcium	ppm	ASTM D5185(m)		57	---	---
Phosphorus	ppm	ASTM D5185(m)		444	---	---
Zinc	ppm	ASTM D5185(m)		480	---	---
Sulfur	ppm	ASTM D5185(m)		1412	---	---
Lithium	ppm	ASTM D5185(m)		<1	---	---

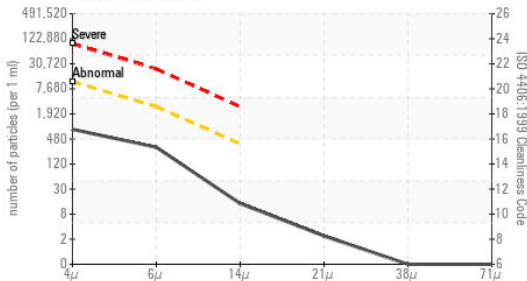
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	1	---	---
Sodium	ppm	ASTM D5185(m)		<1	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Water	%	ASTM D6304*	>0.05	0.002	---	---
ppm Water	ppm	ASTM D6304*	>500	18	---	---

OIL ANALYSIS REPORT

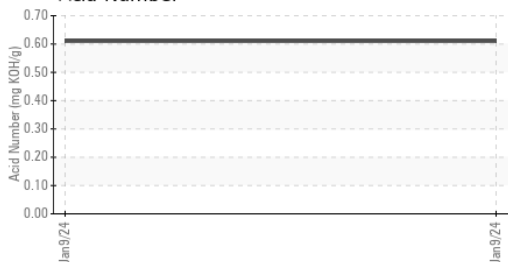
▲ Ferrous Alloys



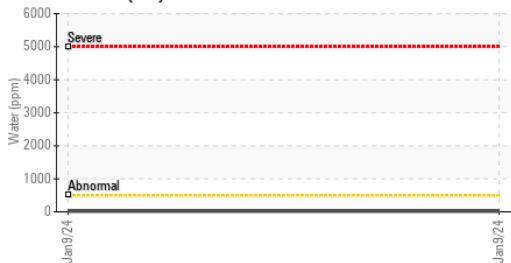
Particle Count



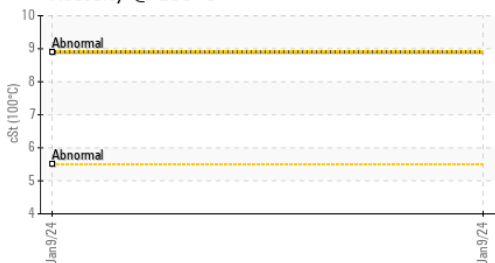
Acid Number



Water (KF)



Viscosity @ 100°C





FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	720	---	---
Particles >6µm	ASTM D7647	>2500	266	---	---
Particles >14µm	ASTM D7647	>320	12	---	---
Particles >21µm	ASTM D7647	>80	2	---	---
Particles >38µm	ASTM D7647	>20	0	---	---
Particles >71µm	ASTM D7647	>4	0	---	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	17/15/11	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*		0.61	---	---

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)	46	64.6	---	---
Visc @ 100°C	cSt ASTM D7279(m)		8.9	---	---
Viscosity Index (VI)	Scale ASTM D2270*		112	---	---

SAMPLE IMAGES

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



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : E30001134 **Received** : 10 Jan 2024
Lab Number : **02607833** **Diagnosed** : 15 Jan 2024
Unique Number : 5708919 **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
 tsorkina@e360s.ca
 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.