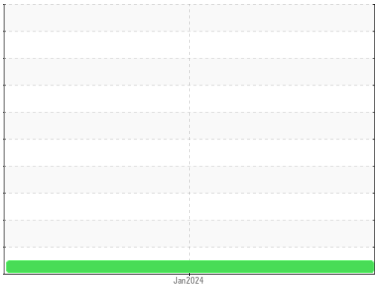
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Area
Kilian - K02400
Machine Id
A2401072
Component
Cutting Fluid
Fluid
CHEM-ECOL CUTTING OIL 521 (--- LTR)

DIAGNOSIS

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

Wear
Copper, iron and lead ppm levels are noted.

Contamination
{not applicable}

Fluid Condition
Sodium ppm levels are notably high.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Batch #		Client Info		**2023 12 0260**	---	---
Department		Client Info		**Production**	---	---
Sample From		Client Info		**Machine**	---	---
Production Stage		Client Info		**Final**	---	---
Sent to WC		Client Info		**01/15/2024**	---	---
Sample Number		Client Info		**E30001153**	---	---
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				**NORMAL**	---	---

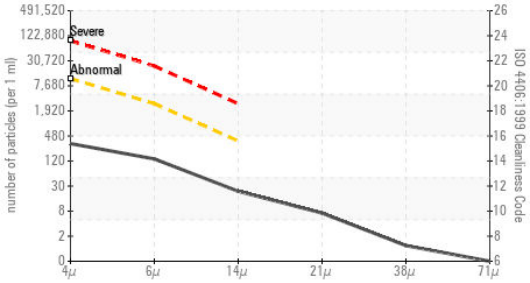
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)		**46**	---	---
Chromium	ppm	ASTM D5185(m)		**<1**	---	---
Nickel	ppm	ASTM D5185(m)		**<1**	---	---
Titanium	ppm	ASTM D5185(m)		**0**	---	---
Silver	ppm	ASTM D5185(m)		**0**	---	---
Aluminum	ppm	ASTM D5185(m)		**4**	---	---
Lead	ppm	ASTM D5185(m)		**445**	---	---
Copper	ppm	ASTM D5185(m)		**26**	---	---
Tin	ppm	ASTM D5185(m)		**<1**	---	---
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)		**2**	---	---
Barium	ppm	ASTM D5185(m)		**2**	---	---
Molybdenum	ppm	ASTM D5185(m)		**0**	---	---
Manganese	ppm	ASTM D5185(m)		**49**	---	---
Magnesium	ppm	ASTM D5185(m)		**79**	---	---
Calcium	ppm	ASTM D5185(m)		**814**	---	---
Phosphorus	ppm	ASTM D5185(m)		**528**	---	---
Zinc	ppm	ASTM D5185(m)		**364**	---	---
Sulfur	ppm	ASTM D5185(m)		**31199**	---	---
Lithium	ppm	ASTM D5185(m)		**<1**	---	---

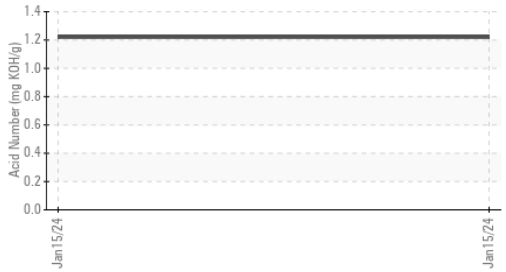
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)		**7**	---	---
Sodium	ppm	ASTM D5185(m)		**12**	---	---
Potassium	ppm	ASTM D5185(m)	>20	**2**	---	---
Water	%	ASTM D6304*		**0.011**	---	---
ppm Water	ppm	ASTM D6304*		**112**	---	---

OIL ANALYSIS REPORT

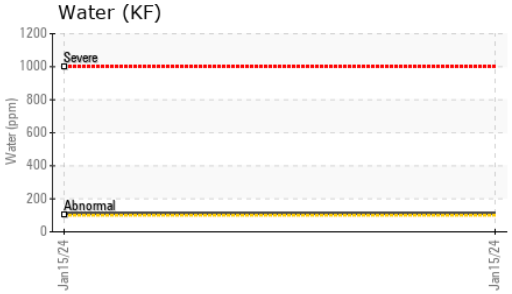
Particle Count



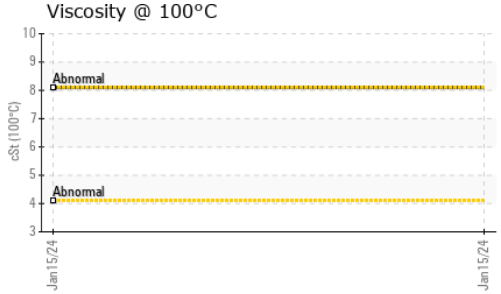
Acid Number



Water (KF)



Viscosity @ 100°C



Particle Trend

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	**277**	---	---
Particles >6µm		ASTM D7647	>2500	**119**	---	---
Particles >14µm		ASTM D7647	>320	**20**	---	---
Particles >21µm		ASTM D7647	>80	**6**	---	---
Particles >38µm		ASTM D7647	>20	**1**	---	---
Particles >71µm		ASTM D7647	>4	**0**	---	---
Oil Cleanliness		ISO 4406 (c)	>20/18/15	**15/14/11**	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		**1.22**	---	---

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*		**NEG**	---	---
Free Water	scalar	Visual*		**NEG**	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	22	**51.5**	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		**8.1**	---	---
Viscosity Index (VI)	Scale	ASTM D2270*		**127**	---	---

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

ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : E30001153 **Recieved** : 17 Jan 2024
Lab Number : 02609397 **Diagnosed** : 22 Jan 2024
Unique Number : 5710483 **Diagnostician** : Tatiana Sorkina
Test Package : IND 2 (Additional Tests: KV100, PrtCount, VI)

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.

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