OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION

Machine Id
317E
Component
Diesel Engine
Fluid
{not provided} (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

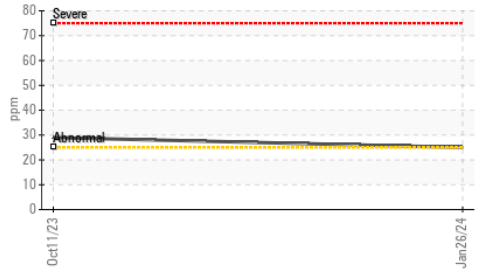
Fuel content negligible. Elemental level of silicon (Si) above normal indicating ingress of seal material.

FLUID CONDITION

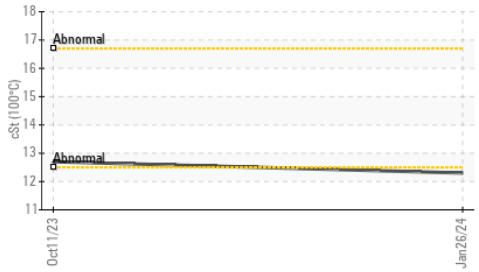
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**KL0013274**	KL0012894	---
Sample Date		Client Info		**26 Jan 2024**	11 Oct 2023	---
Machine Age	hrs	Client Info		**4738**	3410	---
Oil Age	hrs	Client Info		**0**	0	---
Filter Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**N/A**	N/A	---
Filter Changed		Client Info		**N/A**	N/A	---
Sample Status				**ABNORMAL**	ABNORMAL	---
Iron	ppm	ASTM D5185m	>100	**22**	20	---
Chromium	ppm	ASTM D5185m	>20	**<1**	<1	---
Nickel	ppm	ASTM D5185m	>4	**<1**	0	---
Titanium	ppm	ASTM D5185m		**<1**	1	---
Silver	ppm	ASTM D5185m	>3	**0**	0	---
Aluminum	ppm	ASTM D5185m	>20	**5**	4	---
Lead	ppm	ASTM D5185m	>40	**<1**	<1	---
Copper	ppm	ASTM D5185m	>330	**16**	18	---
Tin	ppm	ASTM D5185m	>15	**1**	<1	---
Vanadium	ppm	ASTM D5185m		**0**	0	---
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Silicon	ppm	ASTM D5185m	>25	▲ **25**	▲ 29	---
Potassium	ppm	ASTM D5185m	>20	**8**	10	---
Fuel	%	ASTM D3524	>5	**1.6**	<1.0	---
Water		WC Method	>0.2	**NEG**	NEG	---
Glycol		WC Method		**NEG**	NEG	---
Soot %	%	*ASTM D7844	>3	**0.3**	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	**7.6**	6.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	**22.9**	22.5	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	NONE	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	---
Appearance	scalar	*Visual	NORML	**NORML**	NORML	---
Odor	scalar	*Visual	NORML	**NORML**	NORML	---
Emulsified Water	scalar	*Visual	>0.2	**NEG**	NEG	---
Sodium	ppm	ASTM D5185m		**2**	6	---
Boron	ppm	ASTM D5185m		**34**	57	---
Barium	ppm	ASTM D5185m		**3**	4	---
Molybdenum	ppm	ASTM D5185m		**36**	40	---
Manganese	ppm	ASTM D5185m		**4**	4	---
Magnesium	ppm	ASTM D5185m		**464**	541	---
Calcium	ppm	ASTM D5185m		**1290**	1573	---
Phosphorus	ppm	ASTM D5185m		**627**	698	---
Zinc	ppm	ASTM D5185m		**757**	956	---
Sulfur	ppm	ASTM D5185m		**1987**	2399	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	**21.5**	20.6	---
Base Number (BN)	mg KOH/g	ASTM D2896		**9.3**	9.47	---
Visc @ 100°C	cSt	ASTM D445		▲ **12.3**	12.7	---

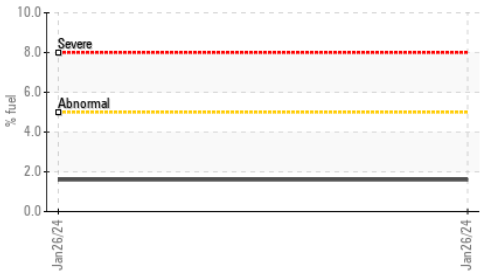
Silicon (ppm)



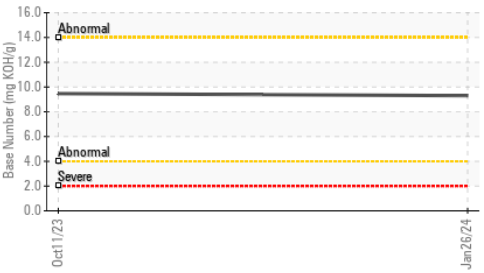
Viscosity @ 100°C



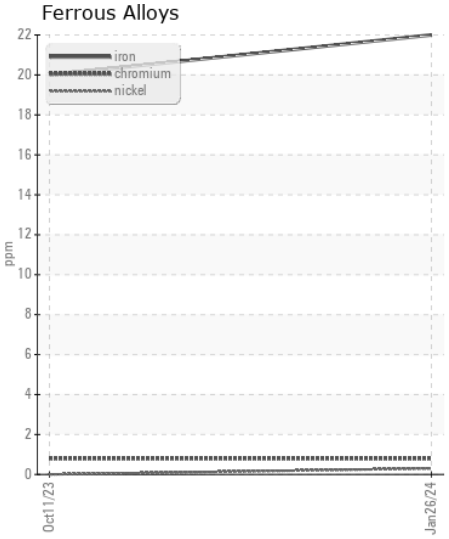
Fuel Dilution



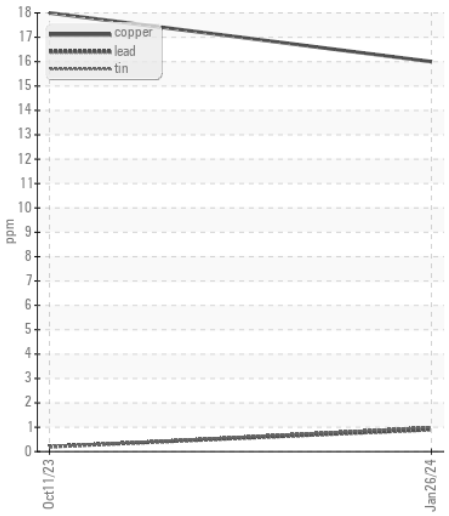
Base Number



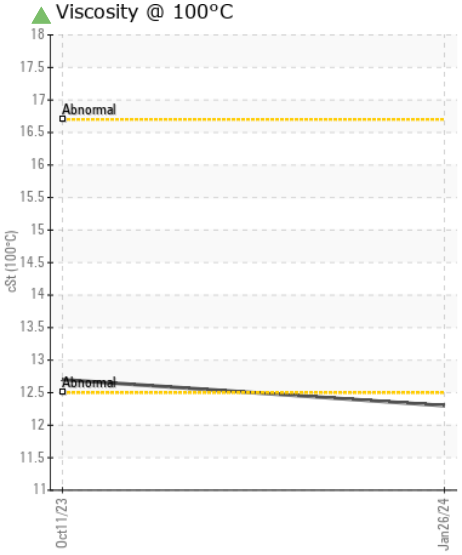
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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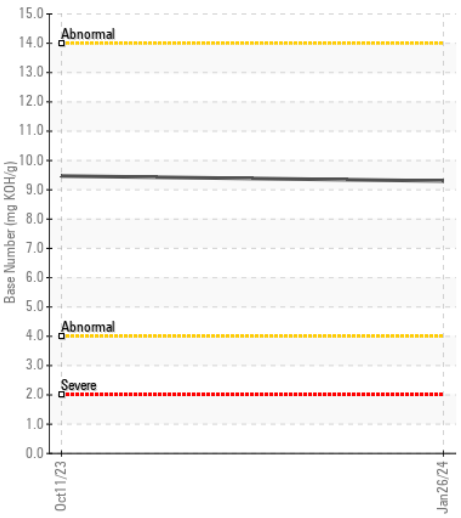

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0013274 **Received** : 14 Feb 2024
Lab Number : 06089441 **Tested** : 19 Feb 2024
Unique Number : 10876886 **Diagnosed** : 19 Feb 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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