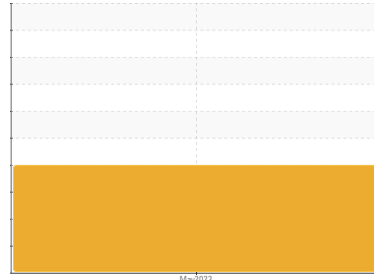




OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id
0301
 Component
Diesel Engine
 Fluid
{not provided} (--- GAL)

DIAGNOSIS

- Recommendation**
The oil is near the end of its useful service life, recommend schedule an oil change. Resample at the next service interval to monitor.
- Wear**
The lead level is abnormal. Cylinder, crank, or cam shaft wear is indicated.
- Contamination**
Sodium and/or potassium levels are high. Test for glycol is negative.
- Fluid Condition**
The BN level is low. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	KL0011471	---	---
Sample Date	Client Info	03 May 2023	---	---
Machine Age	mls Client Info	102272	---	---
Oil Age	mls Client Info	0	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	---	---
Water	WC Method >0.2	NEG	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron ppm	ASTM D5185m >100	▲ 108	---	---
Chromium ppm	ASTM D5185m >20	4	---	---
Nickel ppm	ASTM D5185m >4	0	---	---
Titanium ppm	ASTM D5185m	0	---	---
Silver ppm	ASTM D5185m >3	0	---	---
Aluminum ppm	ASTM D5185m >20	16	---	---
Lead ppm	ASTM D5185m >40	▲ 41	---	---
Copper ppm	ASTM D5185m >330	15	---	---
Tin ppm	ASTM D5185m >15	2	---	---
Vanadium ppm	ASTM D5185m	0	---	---
Cadmium ppm	ASTM D5185m	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron ppm	ASTM D5185m	13	---	---
Barium ppm	ASTM D5185m	0	---	---
Molybdenum ppm	ASTM D5185m	75	---	---
Manganese ppm	ASTM D5185m	<1	---	---
Magnesium ppm	ASTM D5185m	1050	---	---
Calcium ppm	ASTM D5185m	1606	---	---
Phosphorus ppm	ASTM D5185m	1215	---	---
Zinc ppm	ASTM D5185m	1591	---	---
Sulfur ppm	ASTM D5185m	3294	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185m >25	9	---	---
Sodium ppm	ASTM D5185m	11	---	---
Potassium ppm	ASTM D5185m >20	▲ 43	---	---
Glycol %	*ASTM D2982	NEG	---	---

INFRA-RED

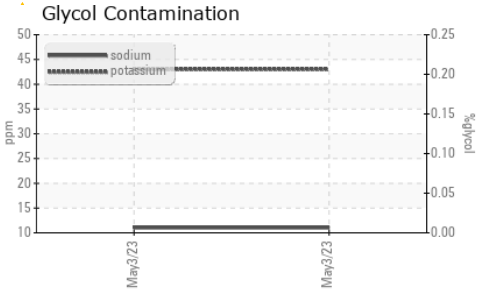
method	limit/base	current	history1	history2
Soot %	*ASTM D7844 >3	2.9	---	---
Nitration	Abs/cm *ASTM D7624 >20	15.1	---	---
Sulfation	Abs/.1mm *ASTM D7415 >30	34.4	---	---

FLUID DEGRADATION

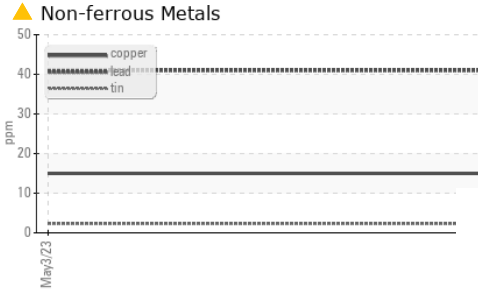
method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	34.2	---	---
Base Number (BN)	mg KOH/g ASTM D2896	▲ 3.4	---	---



OIL ANALYSIS REPORT

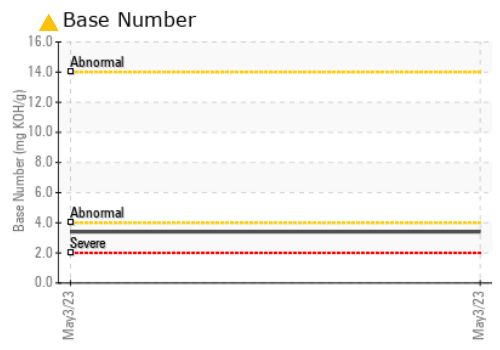
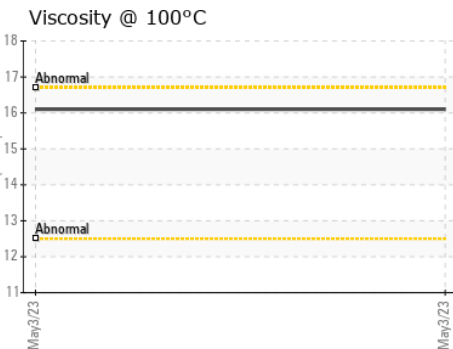
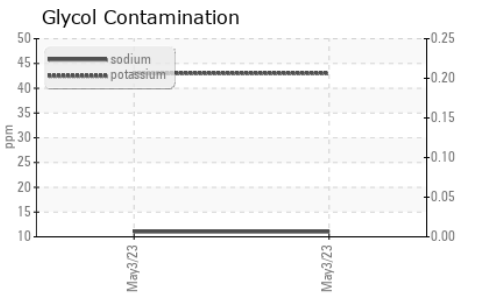
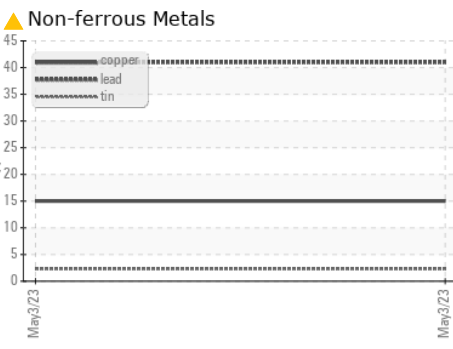
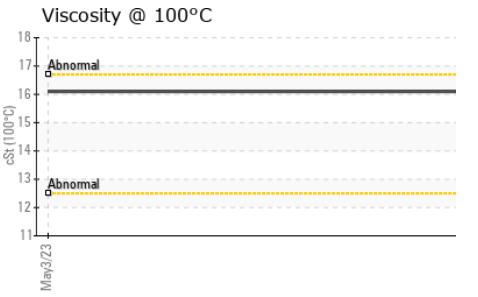
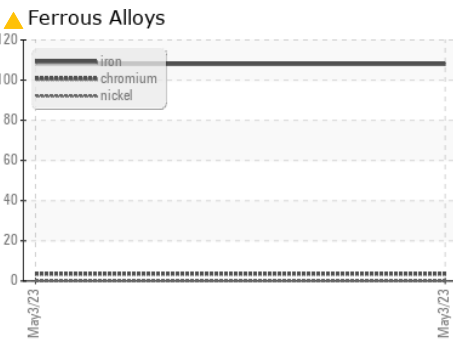
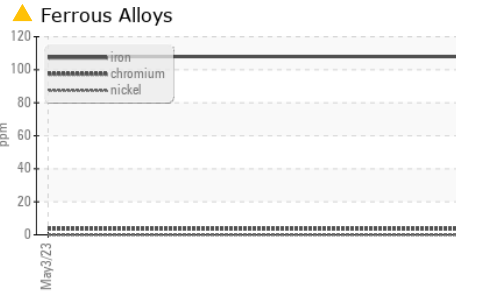


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	16.1	---	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0011471 **Received** : 11 May 2023
Lab Number : 05844778 **Diagnosed** : 16 May 2023
Unique Number : 10468885 **Diagnostician** : Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol)

VILLAGE OF RUIDOSO
 313 CREE MEADOWS DR
 RUIDOSO, NM
 US 88355
 Contact: JERRY PARSONS
 jerryparsons@ruidoso-nm.gov
 T: (575)257-1702
 F: x:

Certificate L2367
 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)