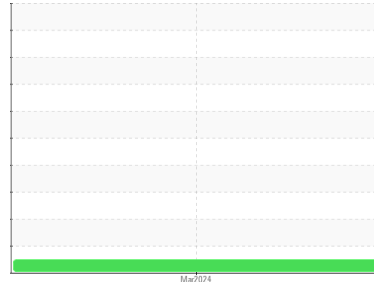


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
Cumberland 150
 Component
Gearbox
 Fluid
GEAR OIL ISO 150 (--- GAL)

DIAGNOSIS

Recommendation
 Resample at the next service interval to monitor. (Customer Sample Comment: Industrial gear oil 150)

Wear
 All component wear rates are normal.

Contamination
 There is no indication of any contamination in the oil.

Fluid Condition
 The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0109932	---	---
Sample Date	Client Info		14 Mar 2024	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed		Client Info	N/A	---	---
Sample Status			NORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	6	---	---
Chromium	ppm	ASTM D5185m >10	0	---	---
Nickel	ppm	ASTM D5185m >10	0	---	---
Titanium	ppm	ASTM D5185m	<1	---	---
Silver	ppm	ASTM D5185m	0	---	---
Aluminum	ppm	ASTM D5185m >25	<1	---	---
Lead	ppm	ASTM D5185m >50	8	---	---
Copper	ppm	ASTM D5185m >200	15	---	---
Tin	ppm	ASTM D5185m >10	1	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<1	---	---
Barium	ppm	ASTM D5185m 15	0	---	---
Molybdenum	ppm	ASTM D5185m 15	0	---	---
Manganese	ppm	ASTM D5185m	<1	---	---
Magnesium	ppm	ASTM D5185m 50	4	---	---
Calcium	ppm	ASTM D5185m 50	27	---	---
Phosphorus	ppm	ASTM D5185m 350	151	---	---
Zinc	ppm	ASTM D5185m 100	7	---	---
Sulfur	ppm	ASTM D5185m 12500	13213	---	---

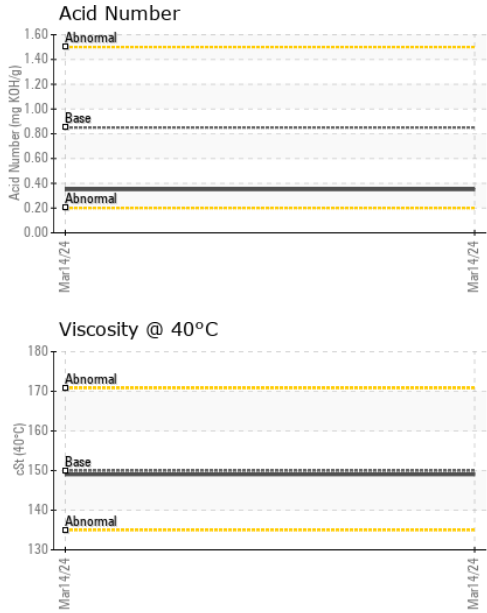
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	5	---	---
Sodium	ppm	ASTM D5185m	<1	---	---
Potassium	ppm	ASTM D5185m >20	2	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.85	0.35	---	---

OIL ANALYSIS REPORT

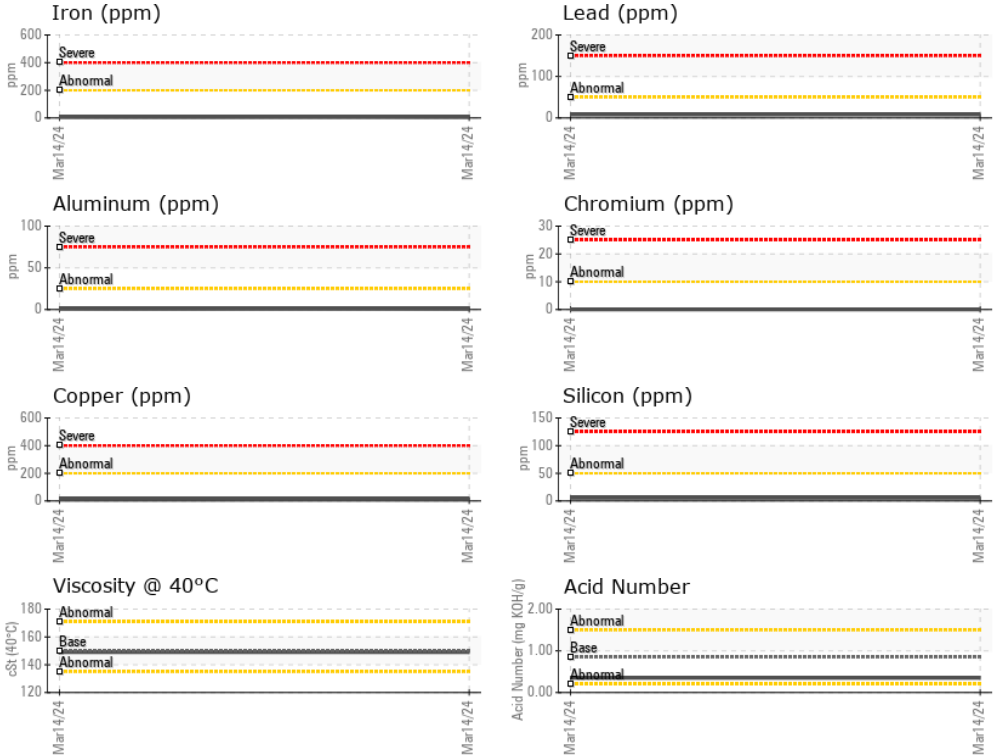


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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 @ 40°C	cSt	ASTM D445	150	149	---

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

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0109932
Lab Number : 06121670
Unique Number : 10930503
Test Package : MOB 2
Received : 18 Mar 2024
Tested : 19 Mar 2024
Diagnosed : 21 Mar 2024 - Jonathan Hester

BORO SAND & STONE
 192 PLAIN ST
 NORTH ATTLEBORO, MA
 US 02760
 Contact: MAINTENANCE
 maintenance@borocorp.com

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)

T:
F: