



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**ALS 15W40/309**  
 Component  
**New (Unused) Oil**  
 Fluid  
**{not provided} (--- LTR)**

## RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DC0031125</b>	DC0031134	DC0031074
Sample Date		Client Info		<b>22 Dec 2023</b>	22 Dec 2023	21 Dec 2023
Machine Age	mls	Client Info		<b>0</b>	0	0
Oil Age	mls	Client Info		<b>0</b>	0	0
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

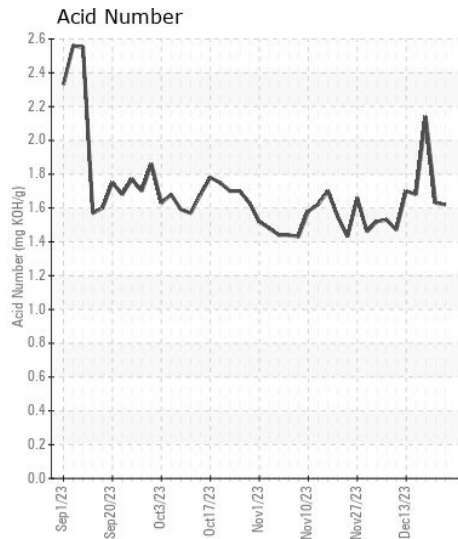
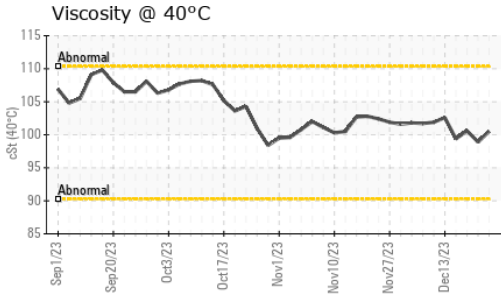
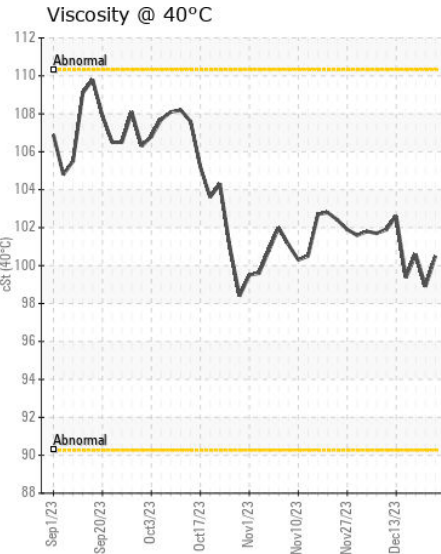
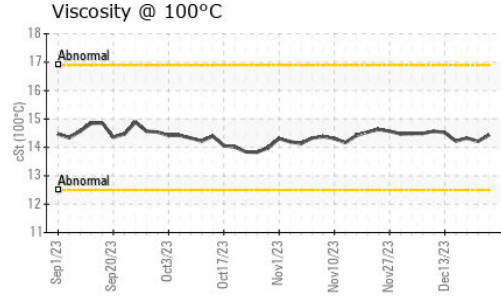
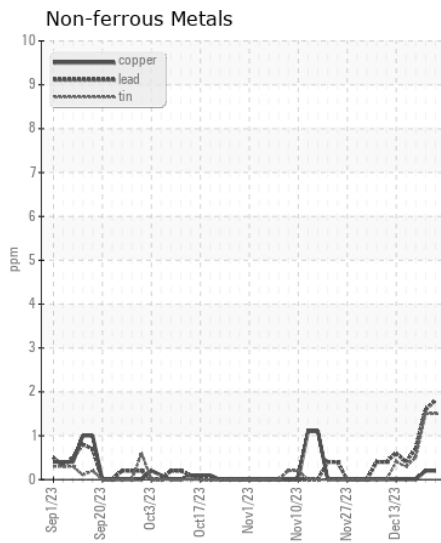
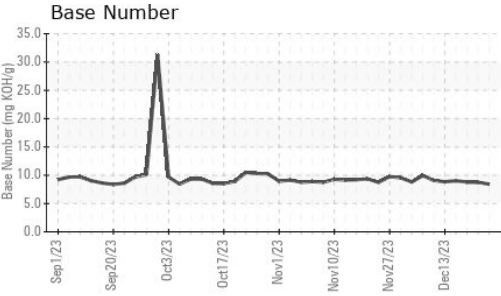
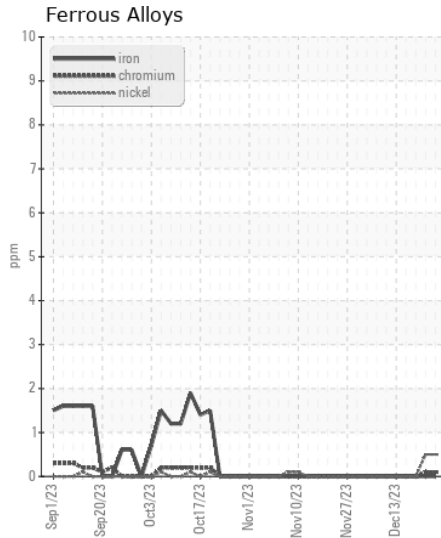
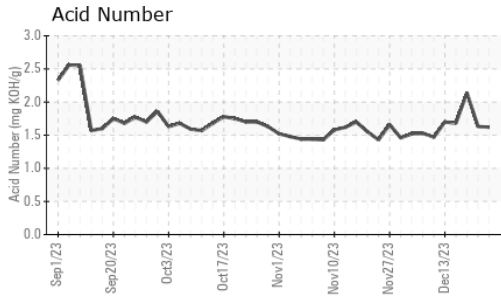
Iron	ppm	ASTM D5185m		<b>0</b>	0	0
Chromium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185m		<b>1</b>	2	<1
Lead	ppm	ASTM D5185m		<b>2</b>	2	<1
Copper	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185m		<b>2</b>	2	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

Silicon	ppm	ASTM D5185m		<b>7</b>	6	6
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	4	1
Water		WC Method		<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual		<b>NEG</b>	NEG	NEG

## FLUID CONDITION

Sodium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Boron	ppm	ASTM D5185m		<b>&lt;1</b>	4	<1
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	4
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>16</b>	31	82
Calcium	ppm	ASTM D5185m		<b>2144</b>	2125	2100
Phosphorus	ppm	ASTM D5185m		<b>913</b>	925	948
Zinc	ppm	ASTM D5185m		<b>1059</b>	1051	1102
Sulfur	ppm	ASTM D5185m		<b>3775</b>	3808	3989
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.62</b>	1.63	1.68
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.42</b>	8.75	9.02
Visc @ 40°C	cSt	ASTM D445		<b>100.5</b>	98.9	99.37
Visc @ 100°C	cSt	ASTM D445		<b>14.44</b>	14.21	14.22
Viscosity Index (VI)	Scale	ASTM D2270		<b>148</b>	147	146



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DC0031125 **Received** : 10 Jan 2024  
**Lab Number** : 06057110 **Diagnosed** : 12 Jan 2024  
**Unique Number** : 10823059 **Diagnostician** : Jonathan Hester  
**Test Package** : MOB 2 ( Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, TBN)

**THE UNITED OIL COMPANY - OPERATIONS**  
 4405 E. BALTIMORE ST  
 BALTIMORE, MD  
 US 21224  
 Contact: MICHELLE HORNING

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: (410)327-7695