



# 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>DC0033684</b>	DC0033738	DC0033955
Sample Date		Client Info		<b>20 Jun 2024</b>	18 Jun 2024	10 Jun 2024
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

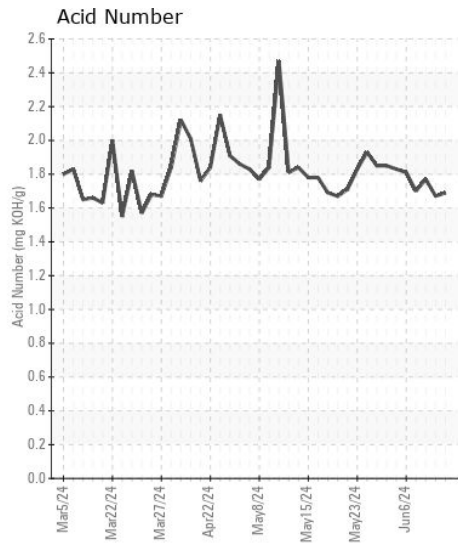
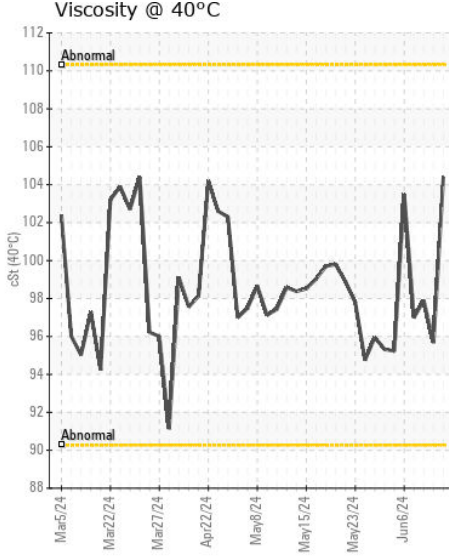
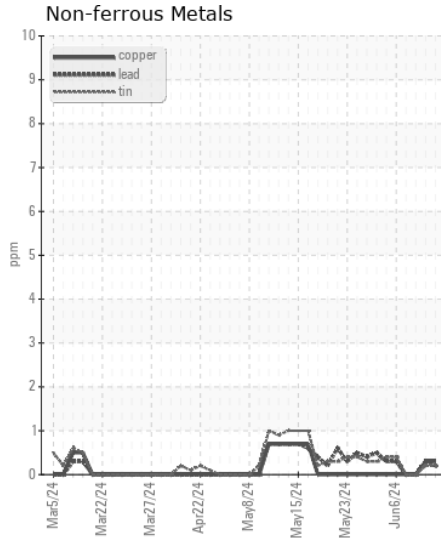
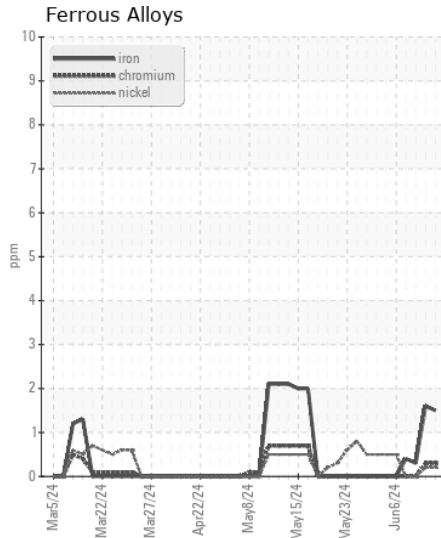
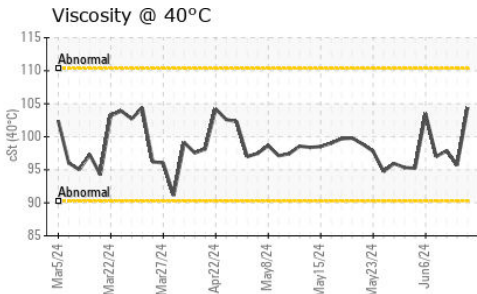
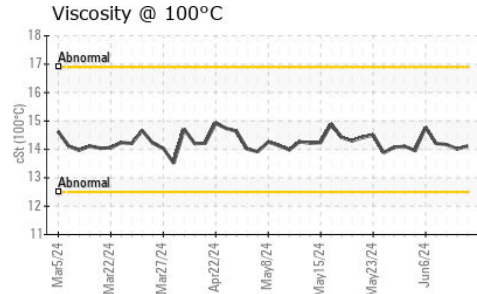
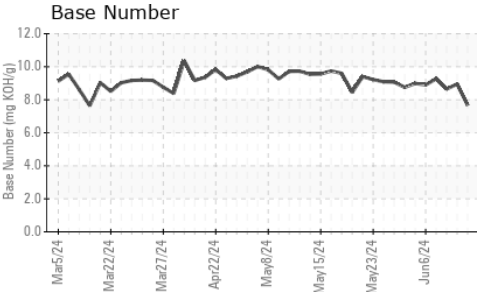
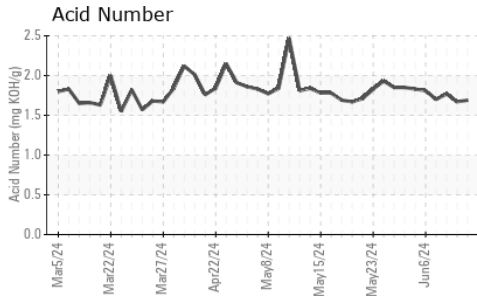
Iron	ppm	ASTM D5185m		<b>2</b>	2	<1
Chromium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m		<b>3</b>	3	<1
Lead	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
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>5</b>	6	6
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	3	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>	0	0
Boron	ppm	ASTM D5185m		<b>2</b>	4	<1
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	2	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>17</b>	30	25
Calcium	ppm	ASTM D5185m		<b>2074</b>	2164	2514
Phosphorus	ppm	ASTM D5185m		<b>838</b>	862	979
Zinc	ppm	ASTM D5185m		<b>935</b>	977	1184
Sulfur	ppm	ASTM D5185m		<b>3471</b>	3590	4801
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.69</b>	1.67	1.77
Base Number (BN)	mg KOH/g	ASTM D2896		<b>7.67</b>	8.95	8.65
Visc @ 40°C	cSt	ASTM D445		<b>104.4</b>	95.68	97.9
Visc @ 100°C	cSt	ASTM D445		<b>14.12</b>	14.01	14.17
Viscosity Index (VI)	Scale	ASTM D2270		<b>137</b>	149	148



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DC0033684  
**Lab Number** : 06232704  
**Unique Number** : 11116197  
**Test Package** : MOB 2 ( Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, TBN, Viscosity @ 100°C, Viscosity @ 40°C )

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

**Received** : 10 Jul 2024  
**Tested** : 12 Jul 2024  
**Diagnosed** : 12 Jul 2024 - Angela Borella  
 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)