



# OIL ANALYSIS REPORT

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

Machine Id  
**ALS 0W20**  
 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>DC0033743</b>	DC0035826	DC0035500
Sample Date		Client Info		<b>13 Jun 2024</b>	10 May 2024	10 Apr 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

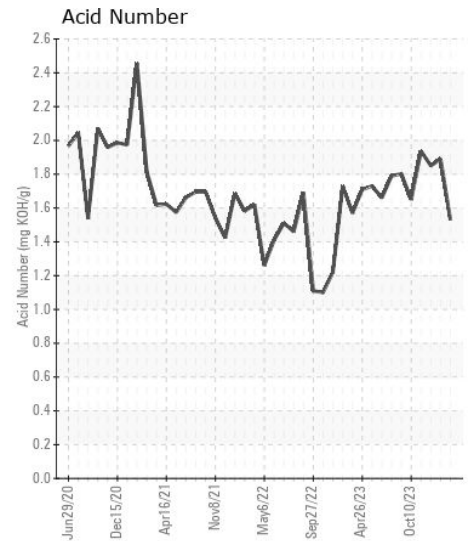
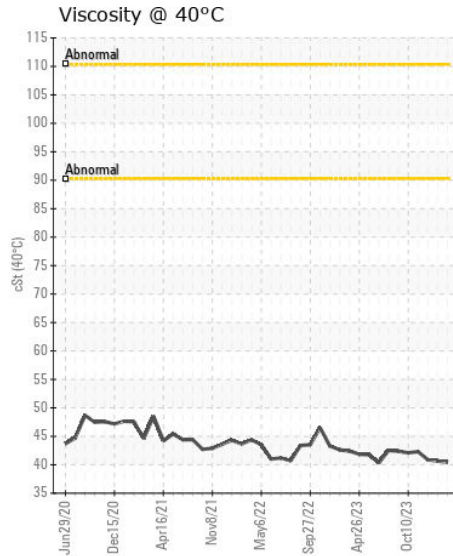
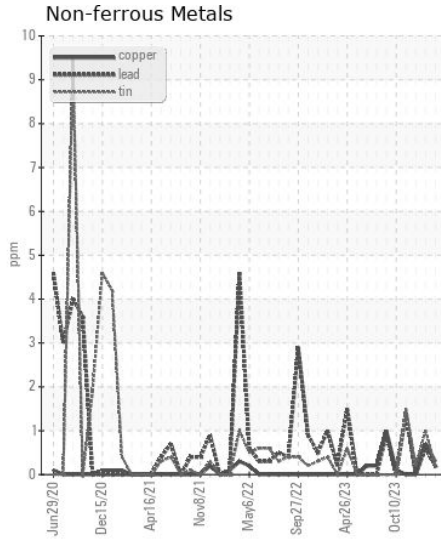
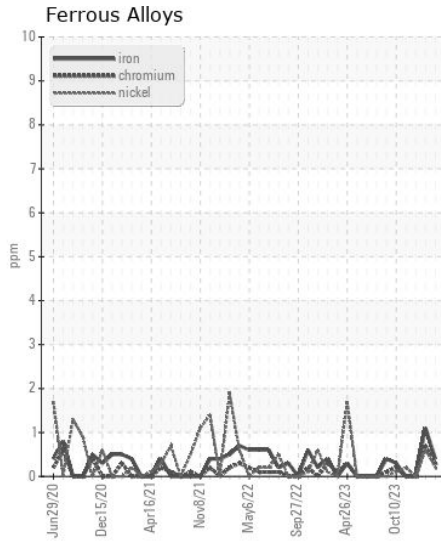
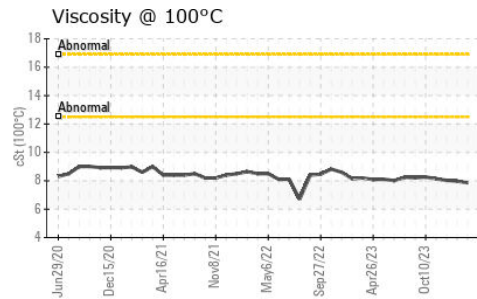
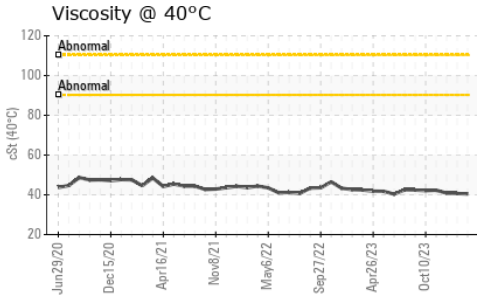
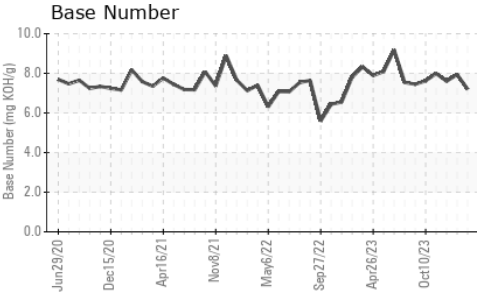
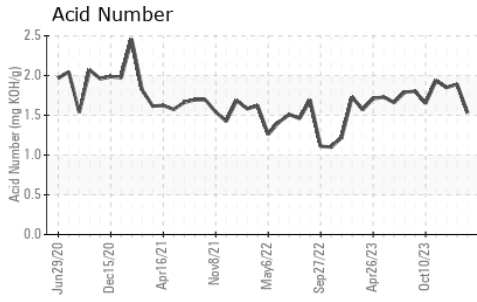
Iron	ppm	ASTM D5185m		<b>&lt;1</b>	1	0
Chromium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m		<b>3</b>	3	<1
Lead	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185m		<b>&lt;1</b>	1	<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>4</b>	14	9
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	<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>&lt;1</b>	4	0
Boron	ppm	ASTM D5185m		<b>205</b>	316	212
Barium	ppm	ASTM D5185m		<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m		<b>62</b>	82	63
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>440</b>	638	497
Calcium	ppm	ASTM D5185m		<b>1122</b>	1428	1150
Phosphorus	ppm	ASTM D5185m		<b>589</b>	855	650
Zinc	ppm	ASTM D5185m		<b>658</b>	939	716
Sulfur	ppm	ASTM D5185m		<b>2430</b>	4189	3059
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.53</b>	1.89	1.85
Base Number (BN)	mg KOH/g	ASTM D2896		<b>7.20</b>	7.94	7.60
Visc @ 40°C	cSt	ASTM D445		<b>40.43</b>	40.66	40.87
Visc @ 100°C	cSt	ASTM D445		<b>7.86</b>	7.97	8.03
Viscosity Index (VI)	Scale	ASTM D2270		<b>169</b>	172	173



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DC0033743  
**Lab Number** : 06232693  
**Unique Number** : 11116186  
**Test Package** : MOB 2 ( Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, TBN, Viscosity)

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

**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)

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