



# OIL ANALYSIS REPORT

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

Machine Id  
**ALS UTF**  
 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>DC0033722</b>	DC0033721	DC0033737
Sample Date		Client Info		<b>09 Jul 2024</b>	21 Jun 2024	13 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>	ATTENTION	ATTENTION

## WEAR

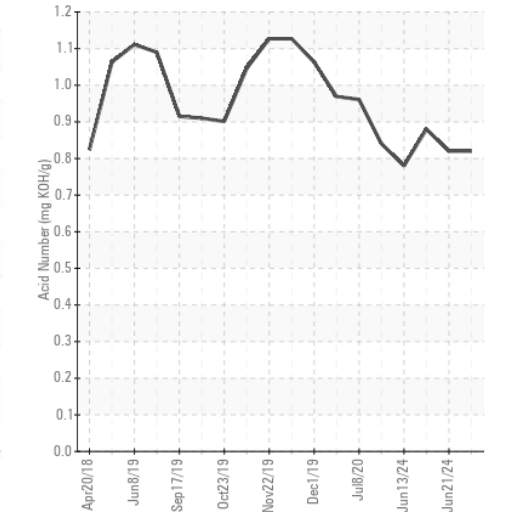
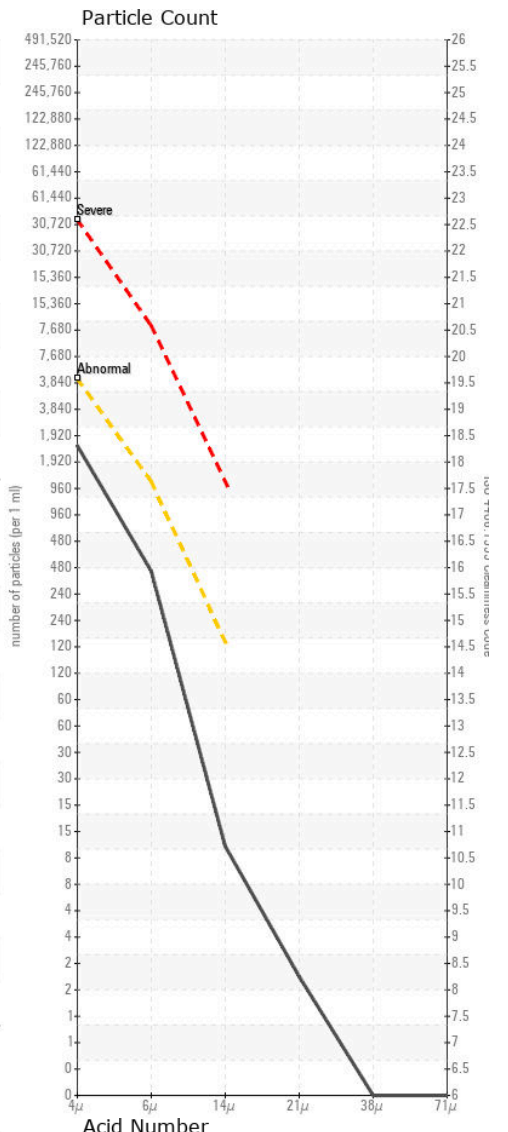
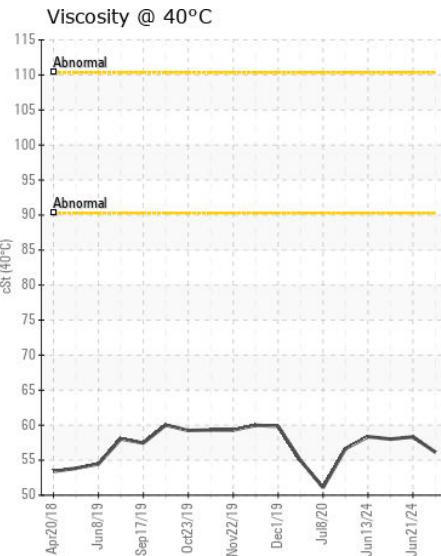
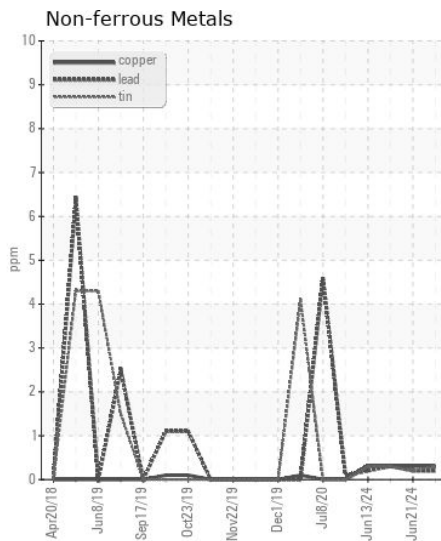
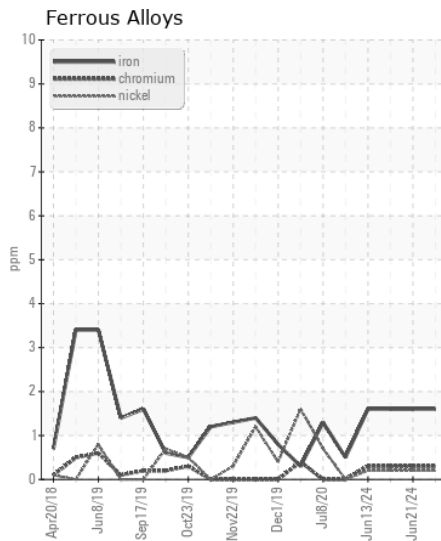
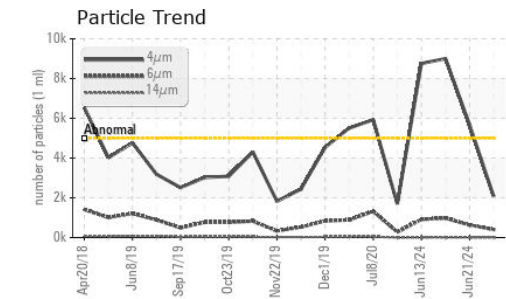
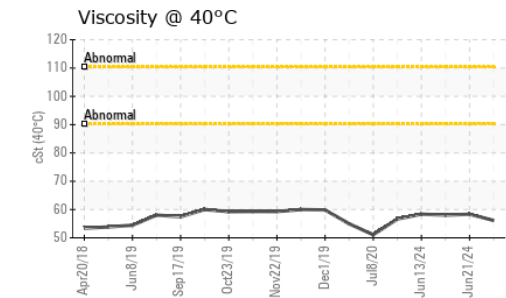
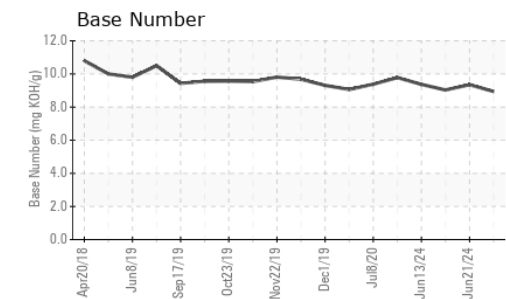
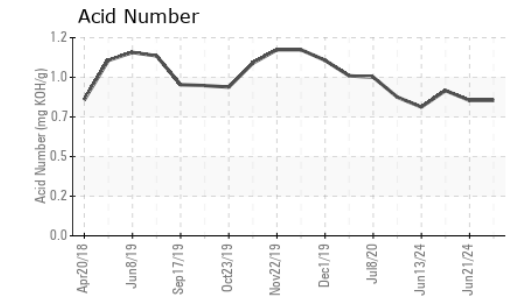
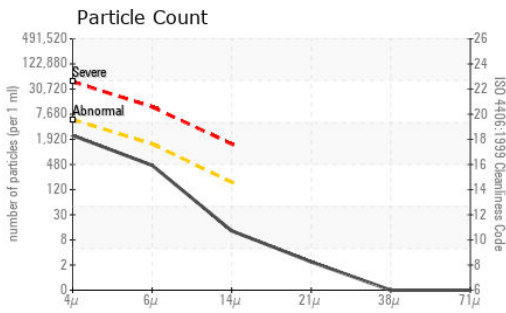
Iron	ppm	ASTM D5185m		<b>2</b>	2	2
Chromium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m		<b>3</b>	3	3
Lead	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
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>7</b>	7	7
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Water		WC Method		<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>2081</b>	5687	8758
Particles >6µm		ASTM D7647	>1300	<b>403</b>	631	914
Particles >14µm		ASTM D7647	>160	<b>11</b>	7	10
Particles >21µm		ASTM D7647	>40	<b>2</b>	1	2
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>18/16/11</b>	20/16/10	20/17/10
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>98</b>	103	104
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>19</b>	14	17
Calcium	ppm	ASTM D5185m		<b>3066</b>	3213	3193
Phosphorus	ppm	ASTM D5185m		<b>986</b>	1045	1045
Zinc	ppm	ASTM D5185m		<b>1247</b>	1317	1304
Sulfur	ppm	ASTM D5185m		<b>2816</b>	3030	3010
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.82</b>	0.82	0.88
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.94</b>	9.35	9.03
Visc @ 40°C	cSt	ASTM D445		<b>56.14</b>	58.33	58.01
Visc @ 100°C	cSt	ASTM D445		<b>9.7</b>	9.92	9.91
Viscosity Index (VI)	Scale	ASTM D2270		<b>158</b>	156	157



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DC0033722  
**Lab Number** : 06232689  
**Unique Number** : 11116182  
**Test Package** : MOB 2 ( Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, TBN, V)

**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:  
 F: (410)327-7695