



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

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>DC0033721</b>	DC0033737	DC0033736
Sample Date		Client Info		<b>21 Jun 2024</b>	13 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>ATTENTION</b>	ATTENTION	ATTENTION

## WEAR

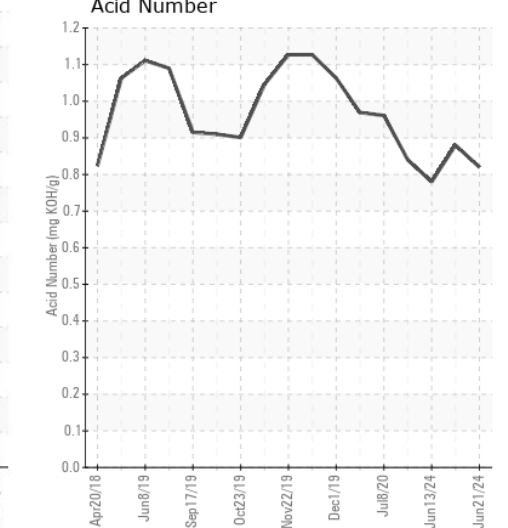
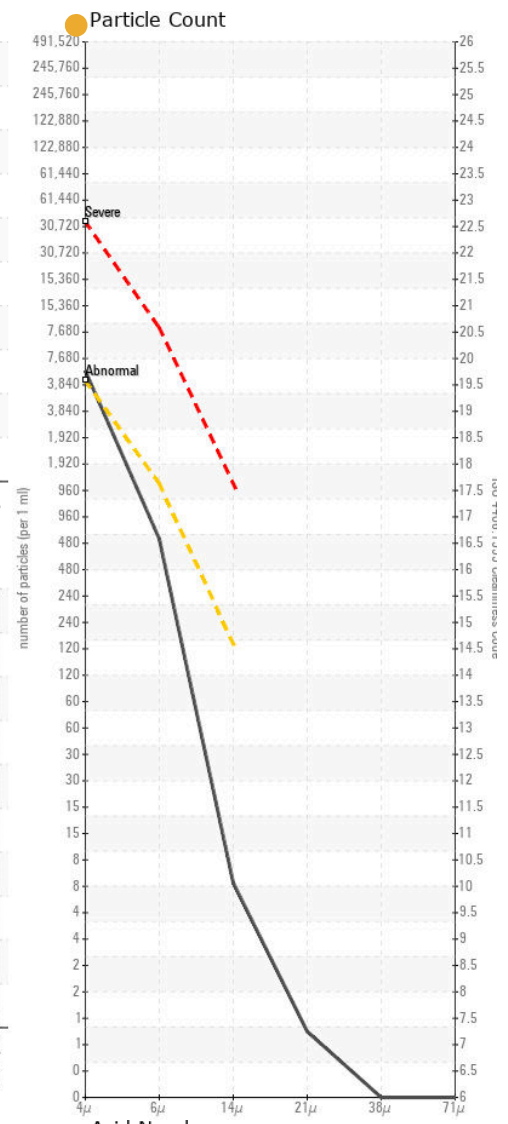
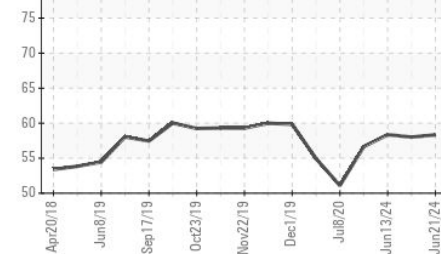
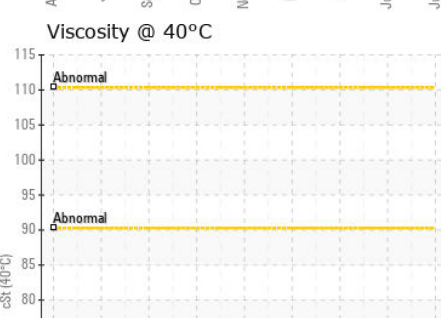
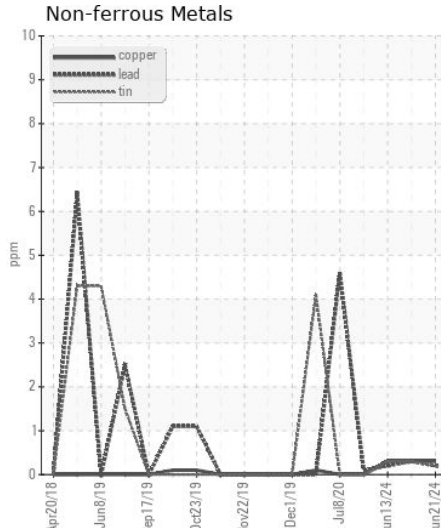
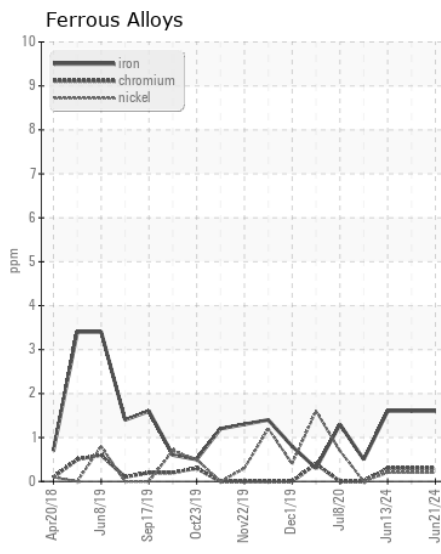
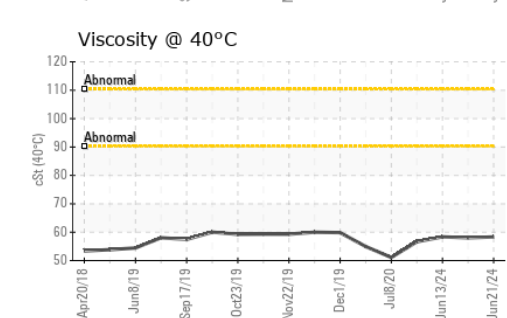
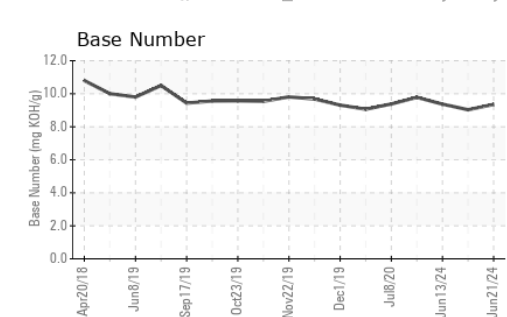
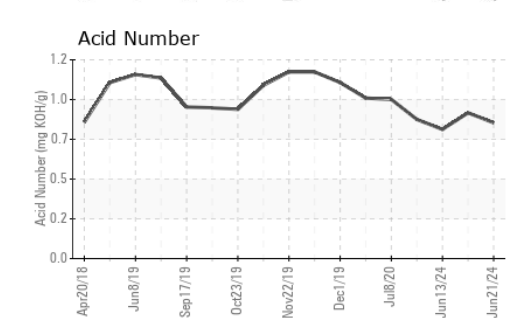
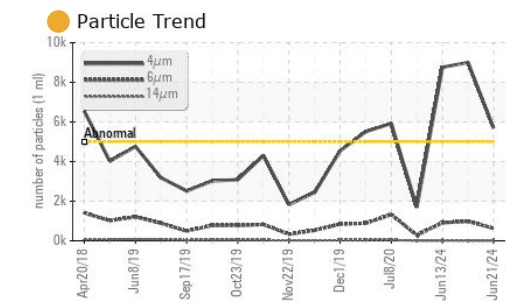
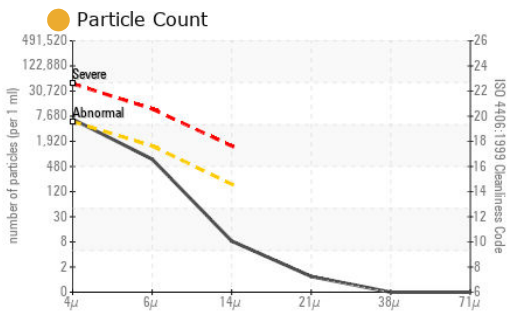
Iron	ppm	ASTM D5185m		<b>2</b>	2	2
Chromium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m		<b>3</b>	3	3
Lead	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM 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>5687</b>	8758	9001
Particles >6µm		ASTM D7647	>1300	<b>631</b>	914	984
Particles >14µm		ASTM D7647	>160	<b>7</b>	10	6
Particles >21µm		ASTM D7647	>40	<b>1</b>	2	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>20/16/10</b>	20/17/10	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>103</b>	104	101
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>14</b>	17	14
Calcium	ppm	ASTM D5185m		<b>3213</b>	3193	3117
Phosphorus	ppm	ASTM D5185m		<b>1045</b>	1045	998
Zinc	ppm	ASTM D5185m		<b>1317</b>	1304	1272
Sulfur	ppm	ASTM D5185m		<b>3030</b>	3010	2973
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.82</b>	0.88	0.78
Base Number (BN)	mg KOH/g	ASTM D2896		<b>9.35</b>	9.03	9.37
Visc @ 40°C	cSt	ASTM D445		<b>58.33</b>	58.01	58.36
Visc @ 100°C	cSt	ASTM D445		<b>9.92</b>	9.91	9.95
Viscosity Index (VI)	Scale	ASTM D2270		<b>156</b>	157	157



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DC0033721 **Received** : 10 Jul 2024  
**Lab Number** : 06232688 **Tested** : 12 Jul 2024  
**Unique Number** : 11116181 **Diagnosed** : 12 Jul 2024 - Angela Borella  
**Test Package** : MOB 2 ( Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, TBN, ~~Q~~

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

Certificate L2367  
 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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