



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**AW 68**  
 Component  
**New (Unused) Oil**  
 Fluid  
**ISO 68 (--- 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>DC0035532</b>	DC0035594	DC0031243
Sample Date		Client Info		<b>25 Mar 2024</b>	14 Mar 2024	28 Feb 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

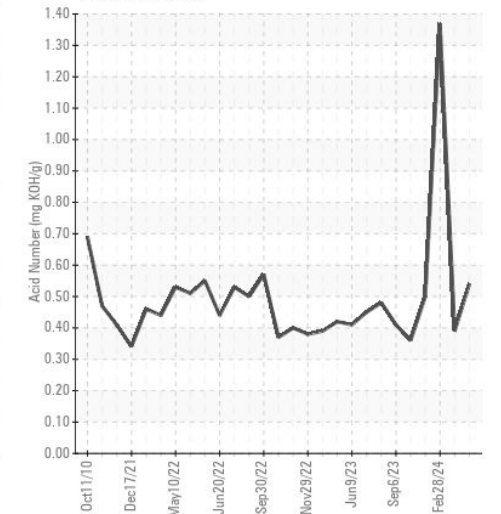
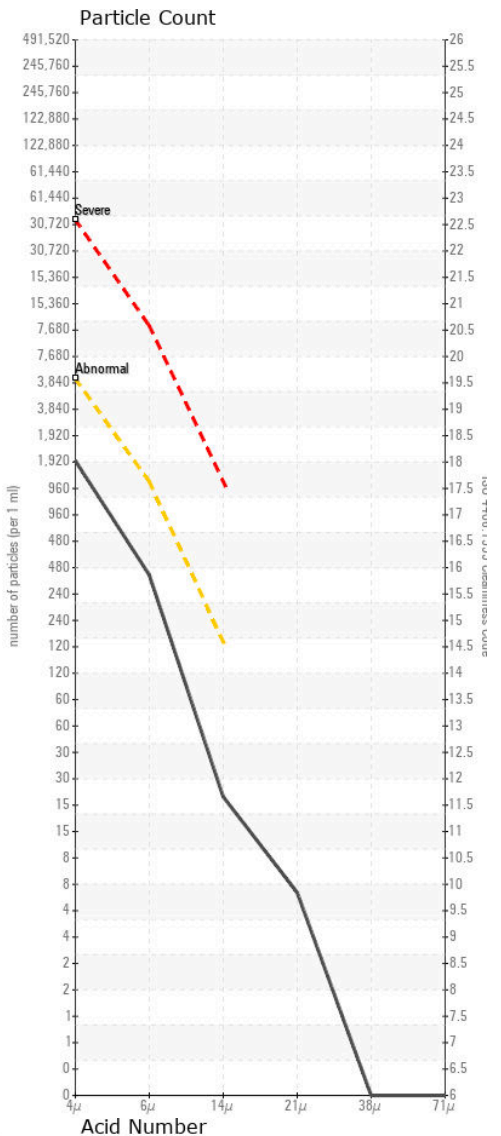
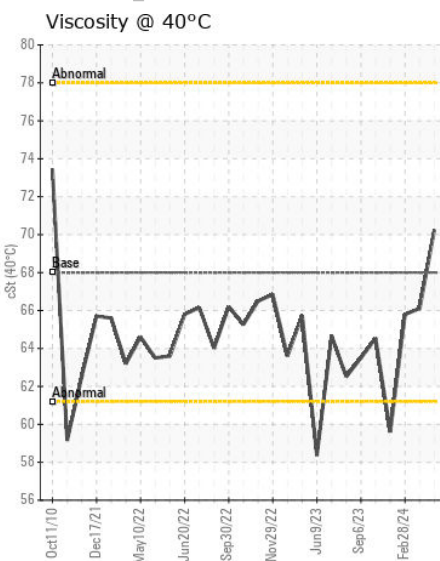
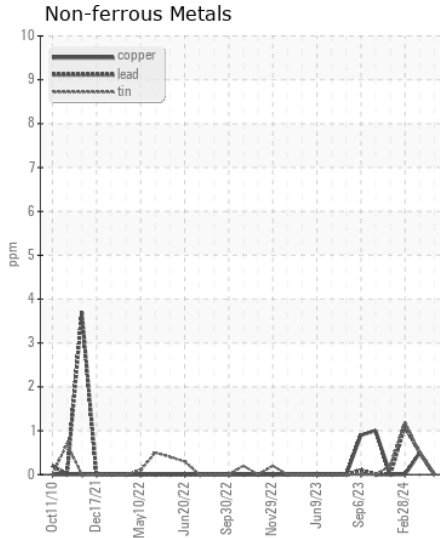
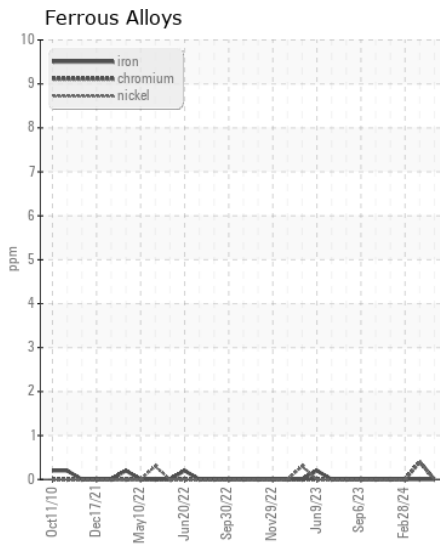
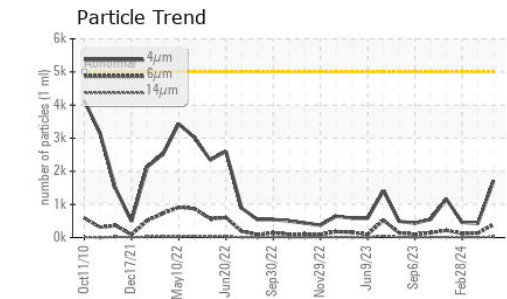
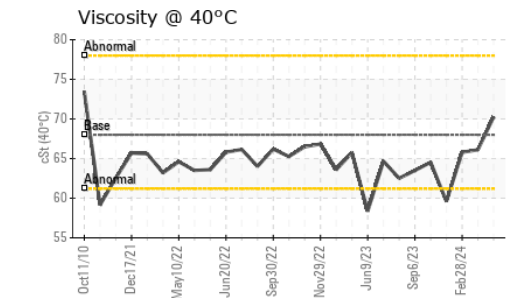
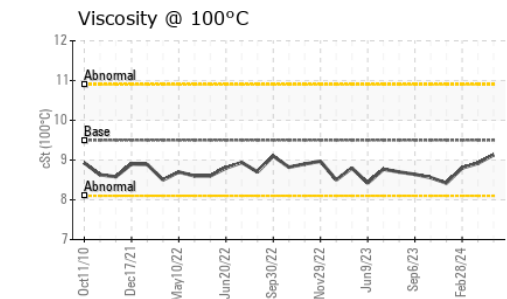
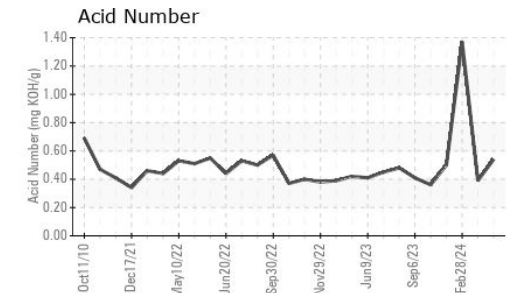
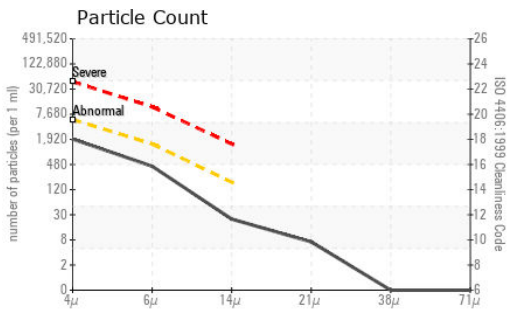
Iron	ppm	ASTM D5185m		<b>0</b>	0	0
Chromium	ppm	ASTM D5185m		<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m		<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m		<b>0</b>	2	0
Lead	ppm	ASTM D5185m		<b>0</b>	<1	1
Copper	ppm	ASTM D5185m		<b>0</b>	<1	0
Tin	ppm	ASTM D5185m		<b>0</b>	<1	1
Vanadium	ppm	ASTM D5185m		<b>0</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>0</b>	<1	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Water		WC Method		<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>1710</b>	427	459
Particles >6µm		ASTM D7647	>1300	<b>383</b>	136	127
Particles >14µm		ASTM D7647	>160	<b>21</b>	11	9
Particles >21µm		ASTM D7647	>40	<b>6</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>18/16/12</b>	16/14/11	16/14/10
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>2</b>	<1	2
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>144</b>	98	96
Calcium	ppm	ASTM D5185m		<b>122</b>	83	74
Phosphorus	ppm	ASTM D5185m		<b>544</b>	274	354
Zinc	ppm	ASTM D5185m		<b>629</b>	400	401
Sulfur	ppm	ASTM D5185m		<b>8045</b>	7166	7395
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.54</b>	0.39	1.369
Visc @ 40°C	cSt	ASTM D445	68.0	<b>70.25</b>	66.11	65.79
Visc @ 100°C	cSt	ASTM D445	9.5	<b>9.13</b>	8.92	8.8
Viscosity Index (VI)	Scale	ASTM D2270	118	<b>104</b>	109	106



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : DC0035532

**Lab Number** : 06158650

**Unique Number** : 10994073

**Test Package** : MOB 2 ( Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, VI )

**Received** : 23 Apr 2024

**Tested** : 29 Apr 2024

**Diagnosed** : 29 Apr 2024 - Jonathan Hester

**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