



# OIL ANALYSIS REPORT

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

Machine Id  
**DURALENE DM 15W40**  
 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>DC0033742</b>	DC0033754	DC0003226
Sample Date		Client Info		<b>13 Jun 2024</b>	11 Jun 2024	17 Mar 2020
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

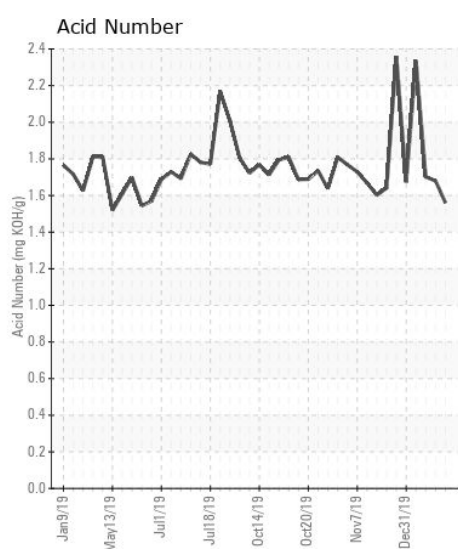
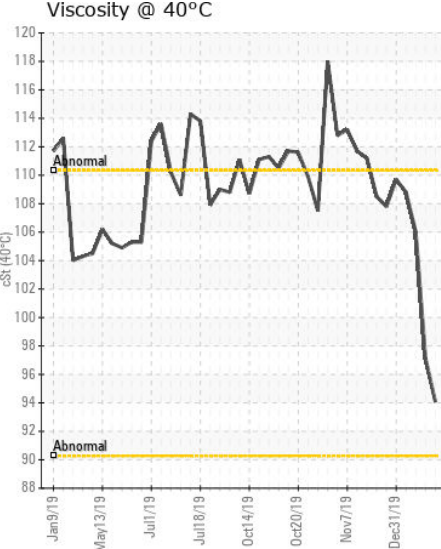
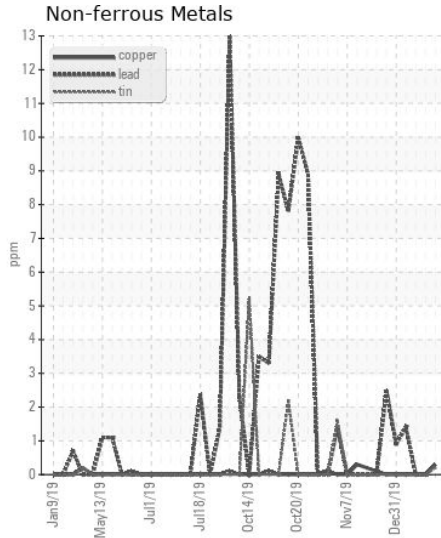
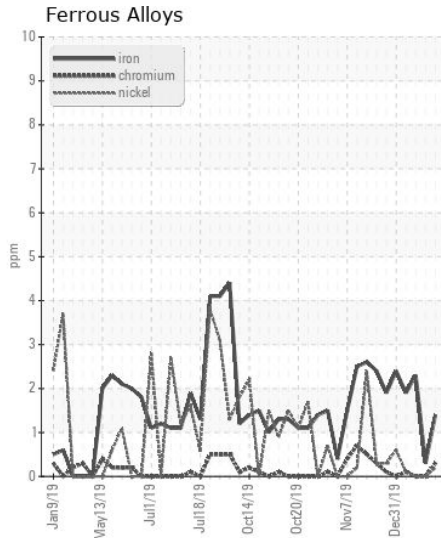
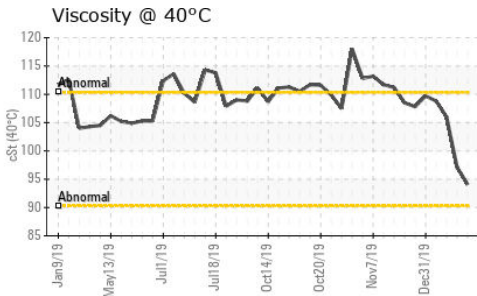
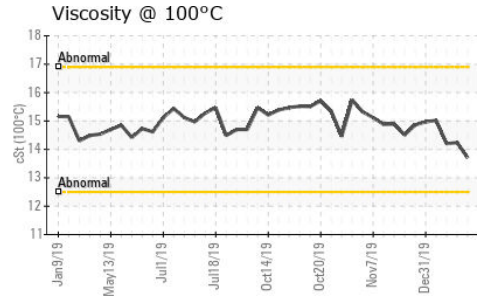
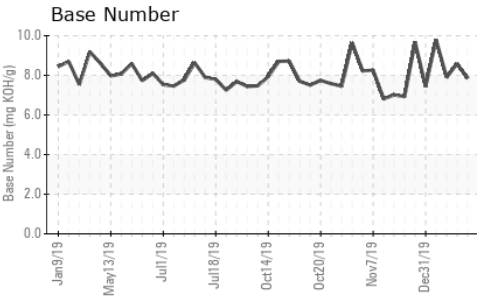
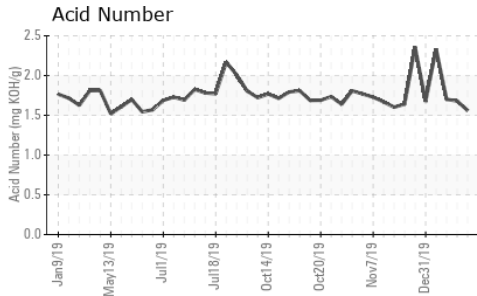
Iron	ppm	ASTM D5185m		<b>1</b>	<1	2
Chromium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m		<b>3</b>	<1	1
Lead	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Tin	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
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>5</b>	6	12
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	2	11
Water		WC Method		<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>---</b>	---	17521
Particles >6µm		ASTM D7647	>1300	<b>---</b>	---	3687
Particles >14µm		ASTM D7647	>160	<b>---</b>	---	79
Particles >21µm		ASTM D7647	>40	<b>---</b>	---	13
Particles >38µm		ASTM D7647	>10	<b>---</b>	---	3
Particles >71µm		ASTM D7647	>3	<b>---</b>	---	1
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>---</b>	---	21/19/13
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	4
Boron	ppm	ASTM D5185m		<b>3</b>	<1	7
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>2</b>	<1	15
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>43</b>	24	164
Calcium	ppm	ASTM D5185m		<b>1990</b>	2522	4141
Phosphorus	ppm	ASTM D5185m		<b>826</b>	981	1667
Zinc	ppm	ASTM D5185m		<b>926</b>	1177	1829
Sulfur	ppm	ASTM D5185m		<b>3349</b>	4801	5724
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.56</b>	1.68	1.701
Base Number (BN)	mg KOH/g	ASTM D2896		<b>7.85</b>	8.58	7.90
Visc @ 40°C	cSt	ASTM D445		<b>94.06</b>	97.1	106
Visc @ 100°C	cSt	ASTM D445		<b>13.7</b>	14.24	14.2
Viscosity Index (VI)	Scale	ASTM D2270		<b>147</b>	150	136



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DC0033742  
**Lab Number** : 06232692  
**Unique Number** : 11116185  
**Test Package** : MOB 2 ( Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, TBN, Viscosity)

**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