



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
DURALENE FGS 75W90

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		DC0033720	DC0035559	DC0031258
Sample Date		Client Info		27 Jun 2024	07 May 2024	21 Feb 2024
Machine Age	mls	Client Info		0	0	0
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

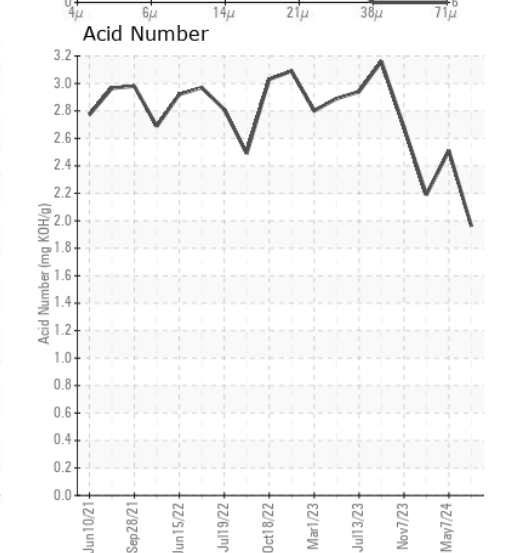
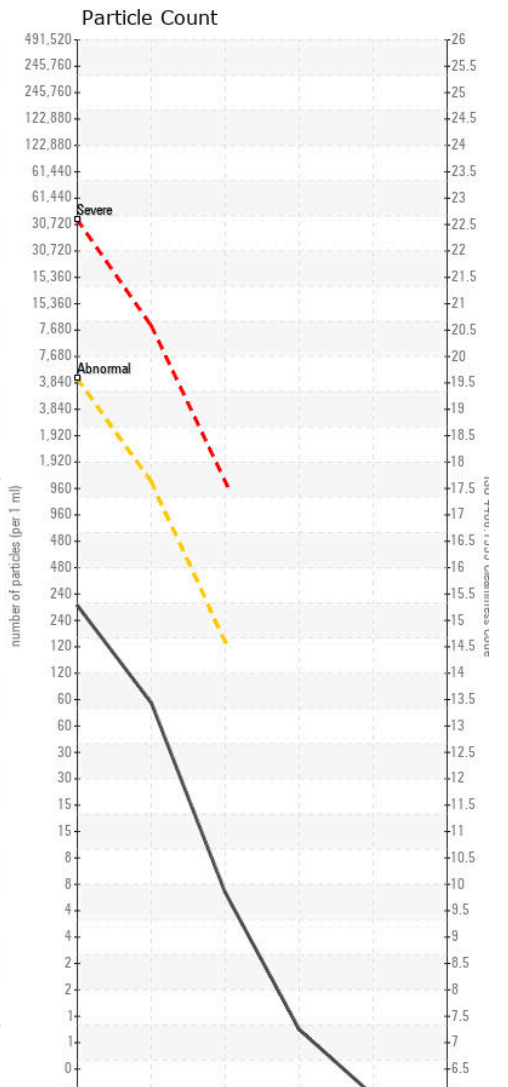
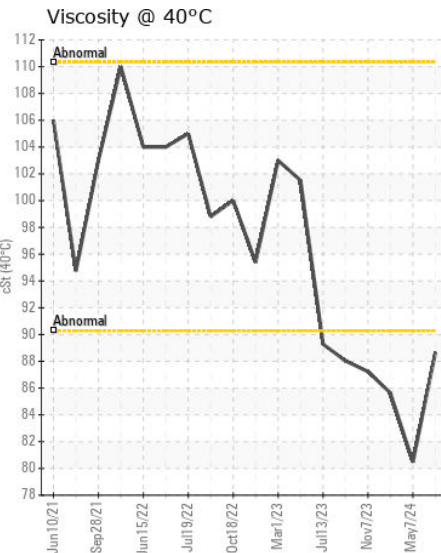
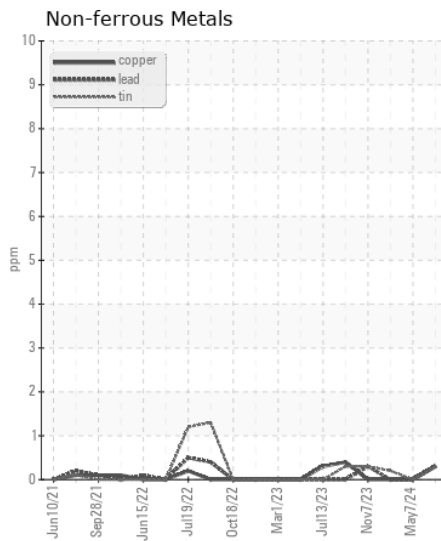
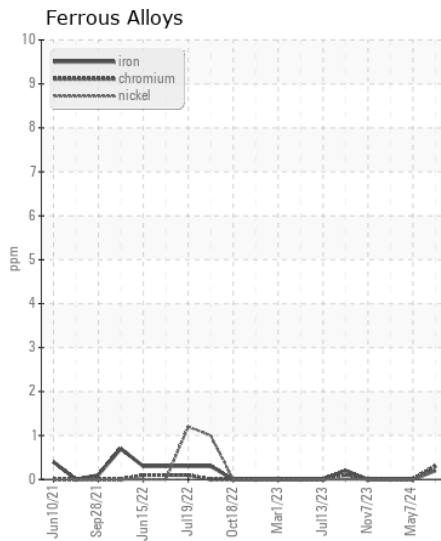
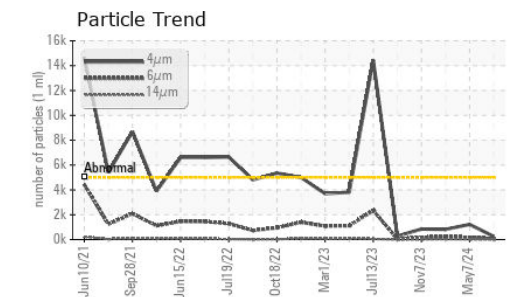
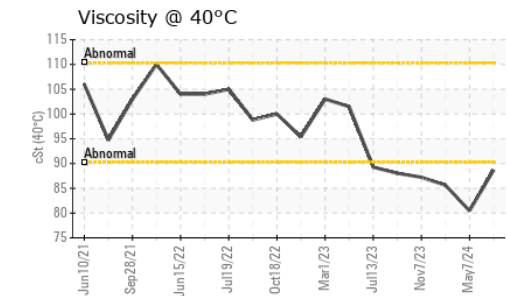
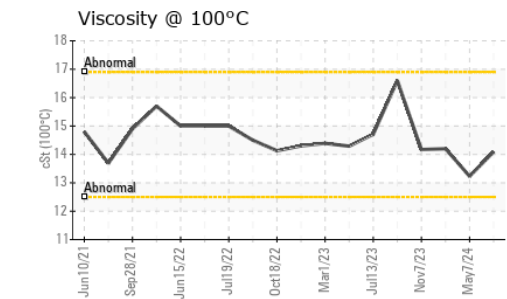
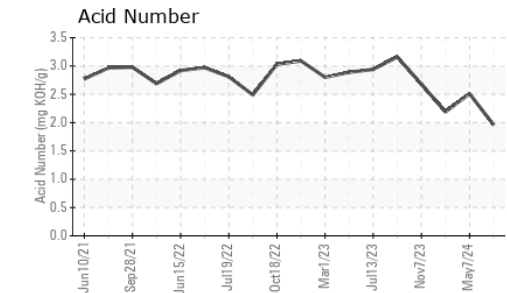
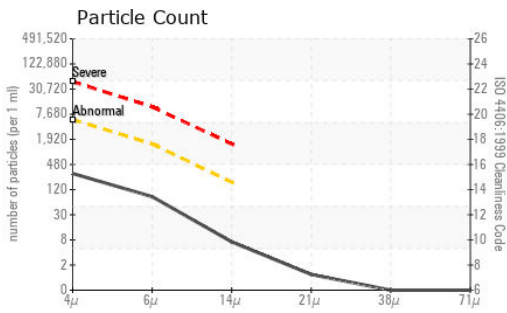
Iron	ppm	ASTM D5185m		<1	0	0
Chromium	ppm	ASTM D5185m		<1	0	0
Nickel	ppm	ASTM D5185m		<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		<1	<1	2
Aluminum	ppm	ASTM D5185m		3	0	0
Lead	ppm	ASTM D5185m		<1	0	0
Copper	ppm	ASTM D5185m		<1	0	0
Tin	ppm	ASTM D5185m		<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

Silicon	ppm	ASTM D5185m		0	0	0
Potassium	ppm	ASTM D5185m	>20	1	0	0
Water		WC Method		NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	257	1218	820
Particles >6µm		ASTM D7647	>1300	72	165	241
Particles >14µm		ASTM D7647	>160	6	11	29
Particles >21µm		ASTM D7647	>40	1	4	9
Particles >38µm		ASTM D7647	>10	0	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	15/13/10	17/15/11	17/15/12
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual		NEG	NEG	NEG

FLUID CONDITION

Sodium	ppm	ASTM D5185m		0	<1	<1
Boron	ppm	ASTM D5185m		258	314	229
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		2	2	5
Calcium	ppm	ASTM D5185m		22	12	14
Phosphorus	ppm	ASTM D5185m		1355	1576	1351
Zinc	ppm	ASTM D5185m		13	0	2
Sulfur	ppm	ASTM D5185m		23059	31718	22291
Acid Number (AN)	mg KOH/g	ASTM D8045		1.96	2.51	2.19
Visc @ 40°C	cSt	ASTM D445		88.67	80.47	85.62
Visc @ 100°C	cSt	ASTM D445		14.09	13.23	14.2
Viscosity Index (VI)	Scale	ASTM D2270		163	166	172



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0033720 **Received** : 10 Jul 2024
Lab Number : 06232680 **Tested** : 12 Jul 2024
Unique Number : 11116173 **Diagnosed** : 12 Jul 2024 - Angela Borella
Test Package : MOB 2 (Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, VI)

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: (410)327-7695