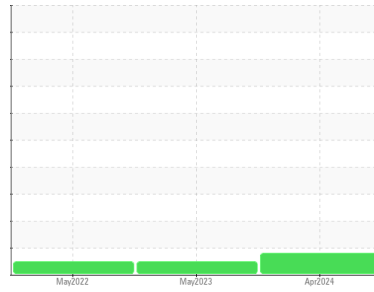




# OIL ANALYSIS REPORT

## Sample Rating Trend



**WEAR**



Machine Id

**W/C CO DES PGN-25 FLEET #038220 961765**

Component

**Diesel Engine**

Fluid

**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

### DIAGNOSIS

#### ▲ Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

#### ▲ Wear

Cylinder, crank, or cam shaft wear is indicated.

#### Contamination

There is no indication of any contamination in the oil.

#### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC0921730</b>	WC0799841	WC0651476
Sample Date	Client Info			<b>15 Apr 2024</b>	14 May 2023	05 May 2022
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>Changed</b>	N/A	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method	>0.2		<b>NEG</b>	NEG	NEG
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<b>▲ 115</b>	1	1
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	1	2
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>0</b>	0	<1
Tin	ppm	ASTM D5185m	>15	<b>3</b>	1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	<b>30</b>	10	84
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>57</b>	48	78
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>590</b>	767	42
Calcium	ppm	ASTM D5185m	3000	<b>1296</b>	1180	2074
Phosphorus	ppm	ASTM D5185m	1150	<b>949</b>	987	979
Zinc	ppm	ASTM D5185m	1350	<b>1089</b>	1294	1161
Sulfur	ppm	ASTM D5185m	4250	<b>3470</b>	4229	3812

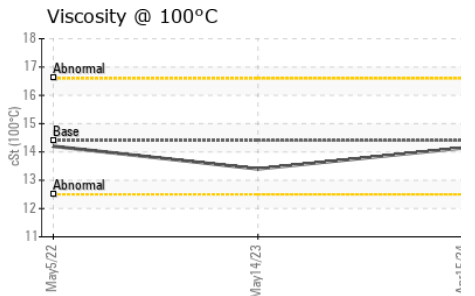
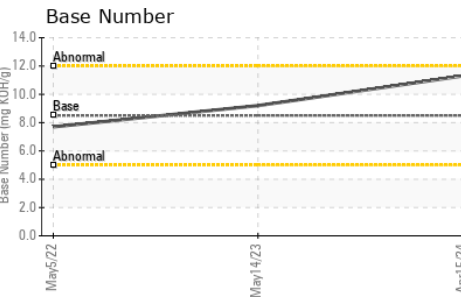
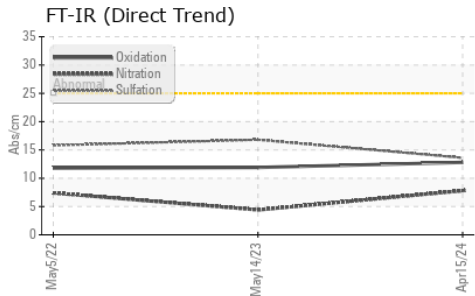
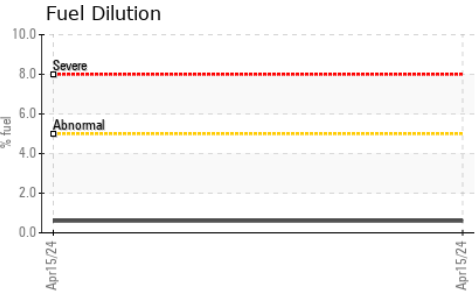
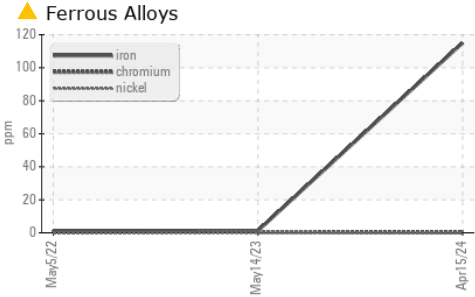
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>7</b>	5	3
Sodium	ppm	ASTM D5185m	>158	<b>0</b>	<1	2
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	0
Fuel	%	ASTM D3524	>5	<b>0.6</b>	<1.0	<1.0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.8</b>	4.4	7.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>13.6</b>	16.8	15.8

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.8</b>	11.9	11.8
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>11.3</b>	9.2	7.7



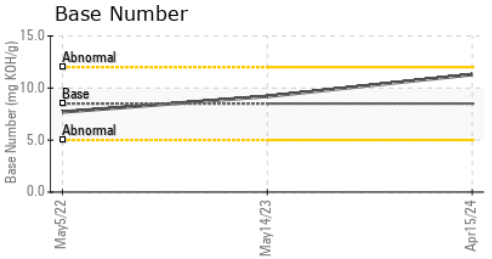
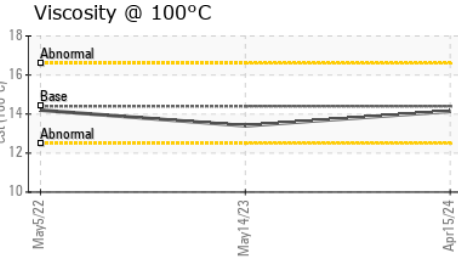
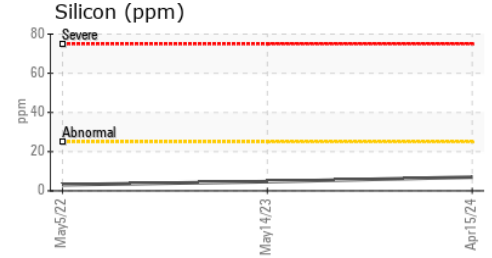
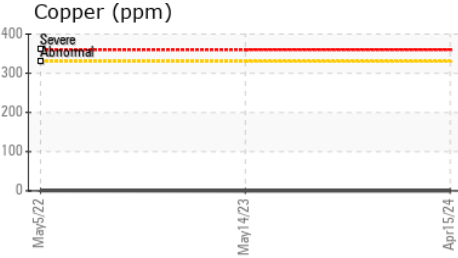
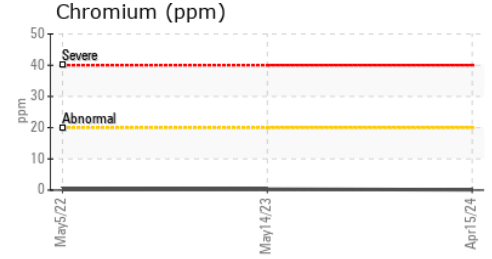
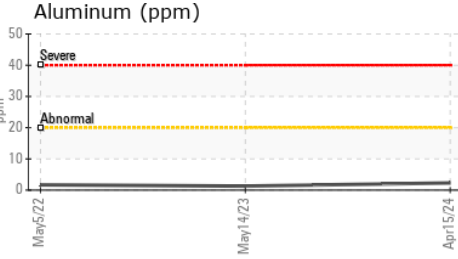
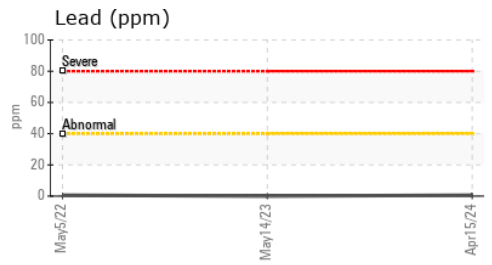
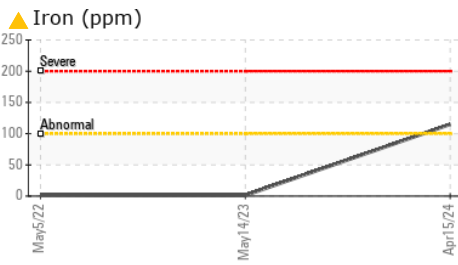
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	13.4	14.2

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0921730      **Received** : 17 Apr 2024  
**Lab Number** : 06151471      **Tested** : 24 Apr 2024  
**Unique Number** : 10981549      **Diagnosed** : 24 Apr 2024 - Jonathan Hester  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel, TBN )

**GEN TECH LTD**  
 3017 RT 9W  
 NEW WINDSOR, NY  
 US 12553  
 Contact: JOE SAYEGH  
 joe@gentechltd.com  
 T: (845)568-0500  
 F: (845)568-3073

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)