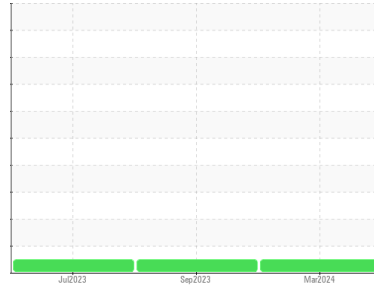




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
LICO 5604

Component
Diesel Engine

Fluid
DISEL ENGINE OIL SAE 40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

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 suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0858475	WC0840423	WC0830934
Sample Date	Client Info			29 Mar 2024	09 Sep 2023	01 Jul 2023
Machine Age	hrs	Client Info		0	25218	24990
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	<1.0
Water	WC Method	>0.2		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	33	42	10
Chromium	ppm	ASTM D5185m	>20	4	2	1
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	5	2
Lead	ppm	ASTM D5185m	>40	<1	<1	0
Copper	ppm	ASTM D5185m	>330	3	<1	0
Tin	ppm	ASTM D5185m	>15	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	12	16	22
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	68	73	72
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	934	858	904
Calcium	ppm	ASTM D5185m	3000	1245	1361	1414
Phosphorus	ppm	ASTM D5185m	1150	1093	1121	1178
Zinc	ppm	ASTM D5185m	1350	1317	1336	1369
Sulfur	ppm	ASTM D5185m	4250	3304	3832	4208

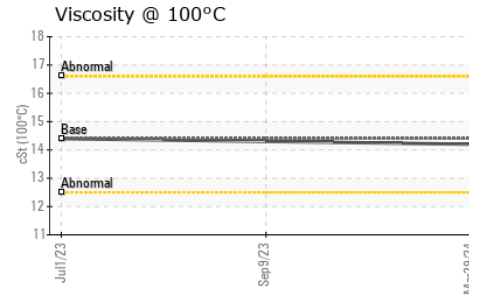
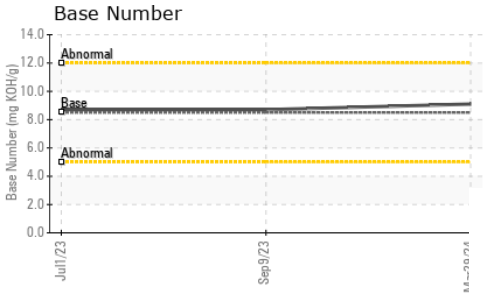
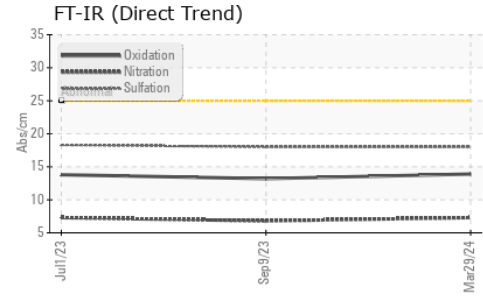
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	8	5	4
Sodium	ppm	ASTM D5185m	>216	2	1	1
Potassium	ppm	ASTM D5185m	>20	3	<1	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.3	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	7.3	6.8	7.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.0	18.0	18.3

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.9	13.2	13.8
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.1	8.7	8.7



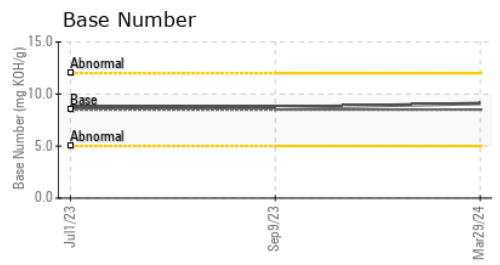
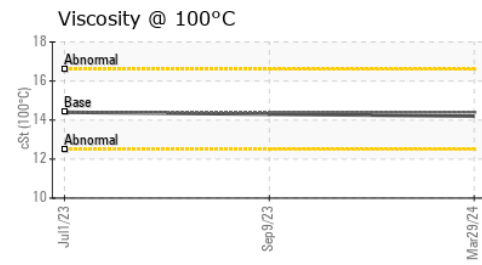
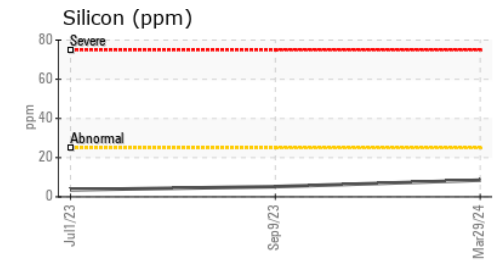
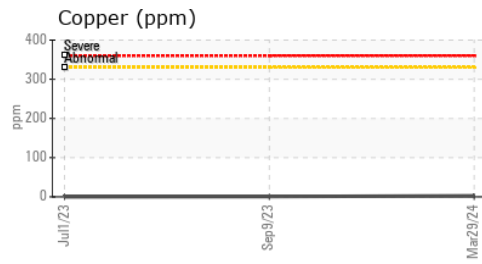
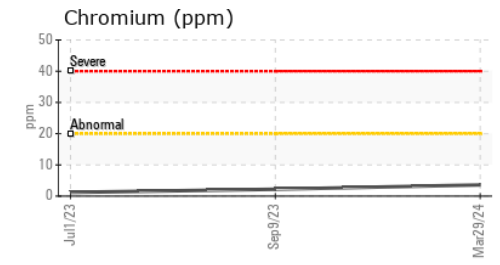
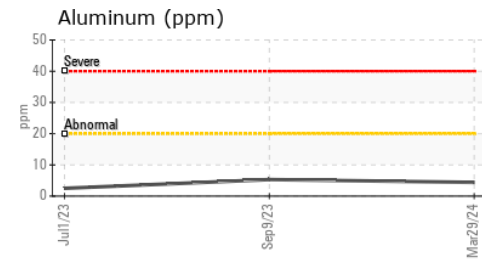
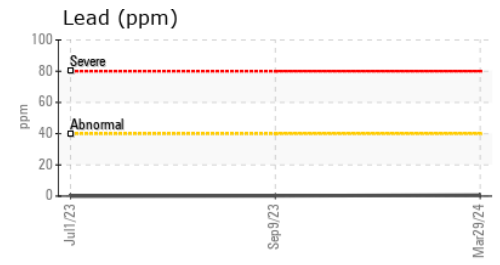
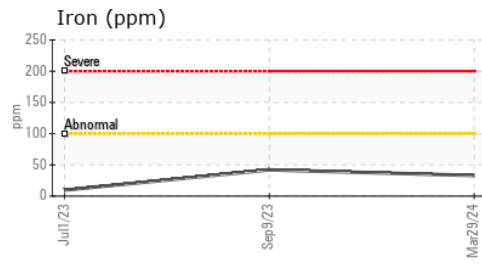
OIL ANALYSIS REPORT



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	14.2	14.3

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0858475 **Received** : 05 Apr 2024
Lab Number : 06139524 **Tested** : 05 Apr 2024
Unique Number : 10964332 **Diagnosed** : 05 Apr 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

INTERSTATE WASTE-NEWARK
 110 EVERGREEN AVE, BAY 3
 NEWARK, NJ
 US 07114
 Contact: Robert Witynski
 RWitynski@interstatewaste.com

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)