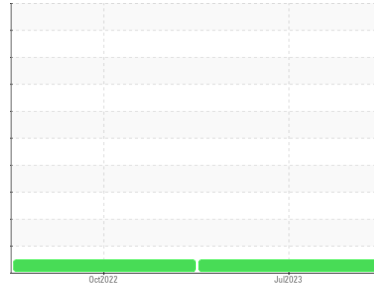




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
LL353214

Component
Diesel Engine

Fluid
DIESEL 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		IL05900957	IL05665412	---
Sample Date	Client Info		01 Jul 2023	05 Oct 2022	---
Machine Age	mls	Client Info	162792	81971	---
Oil Age	mls	Client Info	109203	0	---
Oil Changed	Client Info		N/A	N/A	---
Sample Status			NORMAL	NORMAL	---

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	58	16	---
Chromium	ppm	ASTM D5185m >20	1	<1	---
Nickel	ppm	ASTM D5185m >4	<1	0	---
Titanium	ppm	ASTM D5185m	<1	<1	---
Silver	ppm	ASTM D5185m >3	0	0	---
Aluminum	ppm	ASTM D5185m >20	12	6	---
Lead	ppm	ASTM D5185m >40	0	<1	---
Copper	ppm	ASTM D5185m >330	2	<1	---
Tin	ppm	ASTM D5185m >15	<1	<1	---
Vanadium	ppm	ASTM D5185m	<1	<1	---
Cadmium	ppm	ASTM D5185m	0	<1	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	42	271	---
Barium	ppm	ASTM D5185m 10	0	0	---
Molybdenum	ppm	ASTM D5185m 100	71	87	---
Manganese	ppm	ASTM D5185m	1	<1	---
Magnesium	ppm	ASTM D5185m 450	753	384	---
Calcium	ppm	ASTM D5185m 3000	1467	1396	---
Phosphorus	ppm	ASTM D5185m 1150	838	990	---
Zinc	ppm	ASTM D5185m 1350	1082	1201	---
Sulfur	ppm	ASTM D5185m 4250	3227	3497	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	10	9	---
Sodium	ppm	ASTM D5185m >216	3	1	---
Potassium	ppm	ASTM D5185m >20	9	7	---

INFRA-RED

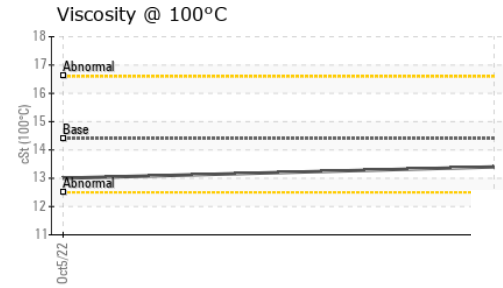
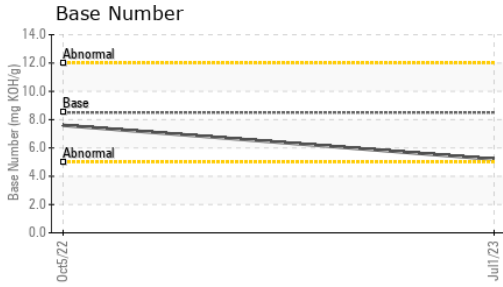
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	1	0.3	---
Nitration	Abs/cm	*ASTM D7624 >20	14.5	8.3	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	28.9	22.8	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	28.2	16.9	---
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	5.2	7.6	---



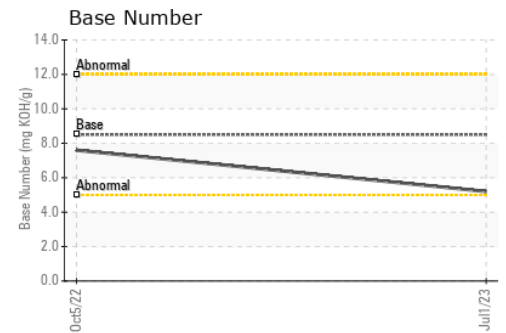
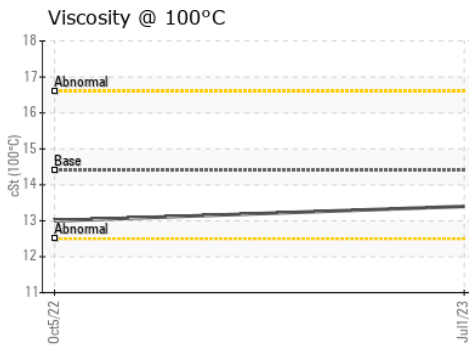
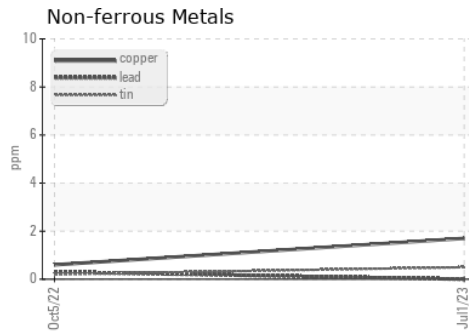
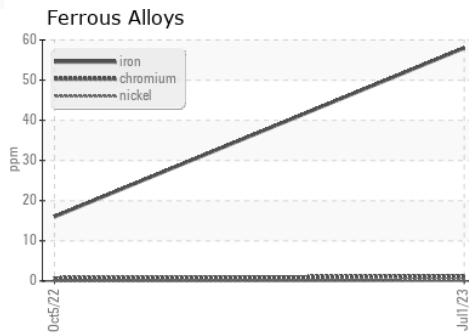
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	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	13.0

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL05900957 **Received** : 18 Jul 2023
Lab Number : **05900957** **Diagnosed** : 19 Jul 2023
Unique Number : 10562313 **Diagnostician** : Angela Borella
Test Package : FLEET

TAMPA IDEALEASE
 5951 ORIENT ROAD
 TAMPA, FL
 US 33610-9565
 Contact: Russ Cook
 russcook@idealease.com
 T: (813)626-9285
 F: (844)270-1356

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)