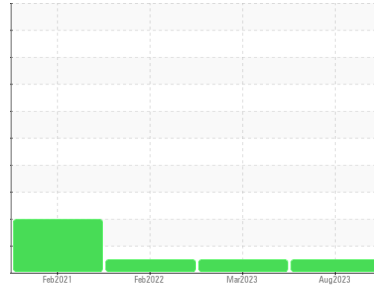




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
6914406

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 10W30 (--- 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 acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			IL05967523	IL05828634	IL05477559
Sample Date	Client Info			14 Aug 2023	22 Mar 2023	09 Feb 2022
Machine Age	mls	Client Info		229475	210722	0
Oil Age	mls	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
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	62	50	57
Chromium	ppm	ASTM D5185m	>20	1	1	2
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	16	9	18
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	2	1	2
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Antimony	ppm	ASTM D5185m		---	---	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	21	19	25
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	80	58	39
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	245	672	721
Calcium	ppm	ASTM D5185m	3000	2046	1613	1512
Phosphorus	ppm	ASTM D5185m	1150	973	870	868
Zinc	ppm	ASTM D5185m	1350	1222	1080	977
Sulfur	ppm	ASTM D5185m	4250	3277	2603	3010

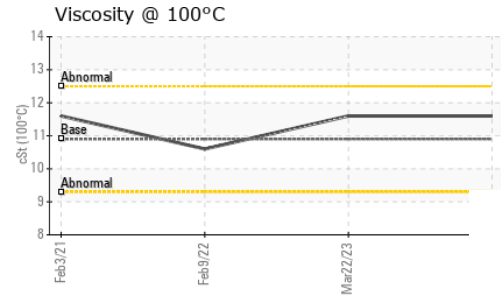
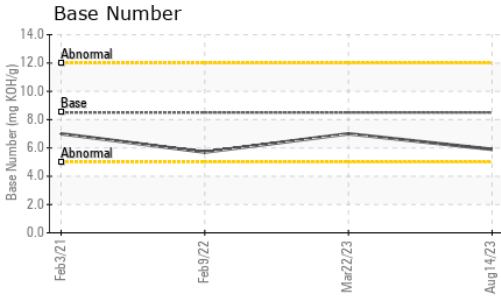
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	9	10	9
Sodium	ppm	ASTM D5185m		3	<1	3
Potassium	ppm	ASTM D5185m	>20	9	10	25

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	1.1	0.8	1
Nitration	Abs/cm	*ASTM D7624	>20	14.6	13.3	13.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.9	24.7	28.4

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	25.8	25.1	22.6
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	5.9	7.0	5.7



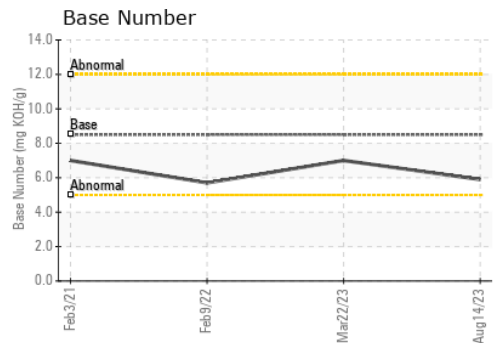
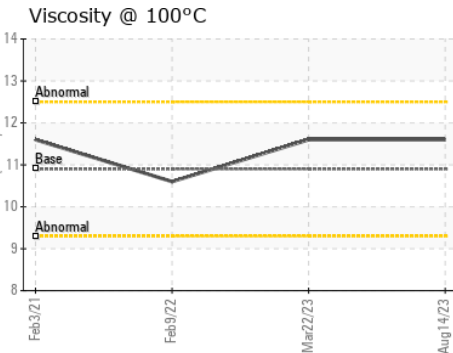
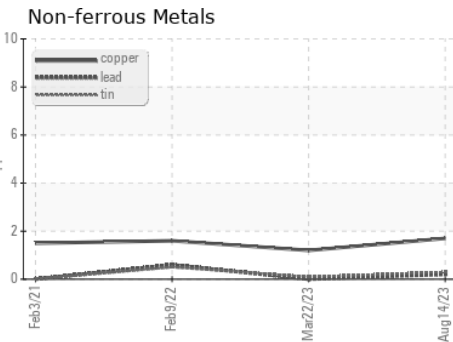
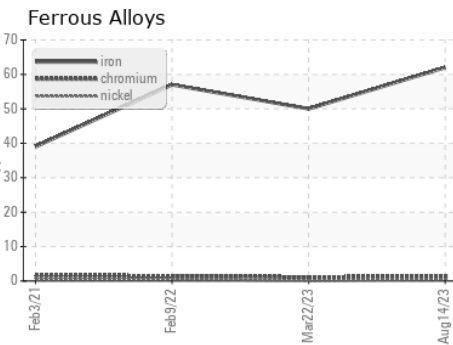
OIL ANALYSIS REPORT



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	10.9	11.6	10.6

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : IL05967523 Received : 03 Oct 2023
 Lab Number : 05967523 Diagnosed : 04 Oct 2023
 Unique Number : 10674074 Diagnostician : Sean Felton
 Test Package : FLEET

IDEALASE-NORCROSS
 4571 NORTH BUFORD HWY
 NORCROSS, GA
 US 30071-2808
 Contact: RICK MARKS

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: (770)300-0614