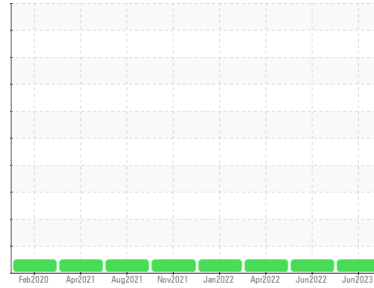




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
4390L

Component
Front Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			IL0028935	IL0023852	IL0023706
Sample Date	Client Info			26 Jun 2023	28 Jun 2022	06 Apr 2022
Machine Age	mls	Client Info		286271	226123	210066
Oil Age	mls	Client Info		15000	15000	15000
Oil Changed	Client Info			Changed	Changed	Changed
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	29	24
Chromium	ppm	ASTM D5185m	>20	4	2	1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	13	19	14
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	1	1	1
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Antimony	ppm	ASTM D5185m		---	---	---
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	3	29	37
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	67	26	41
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	1097	588	563
Calcium	ppm	ASTM D5185m	3000	1206	1579	1730
Phosphorus	ppm	ASTM D5185m	1150	1125	668	836
Zinc	ppm	ASTM D5185m	1350	1417	847	1024
Sulfur	ppm	ASTM D5185m	4250	3670	3025	2195

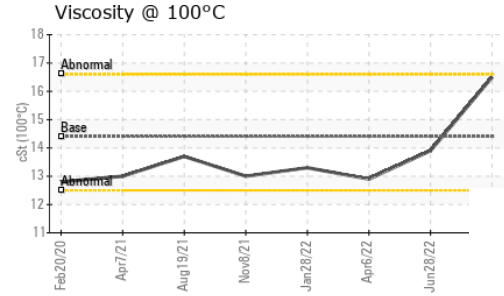
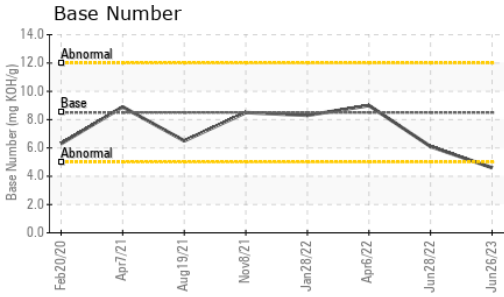
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6	7	8
Sodium	ppm	ASTM D5185m	>158	2	3	<1
Potassium	ppm	ASTM D5185m	>20	6	22	8

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.8	0.6	0.7
Nitration	Abs/cm	*ASTM D7624	>20	16.5	12.8	12.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	32.4	26.5	26.9

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	38.1	29.5	31.1
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	4.6	6.1	9



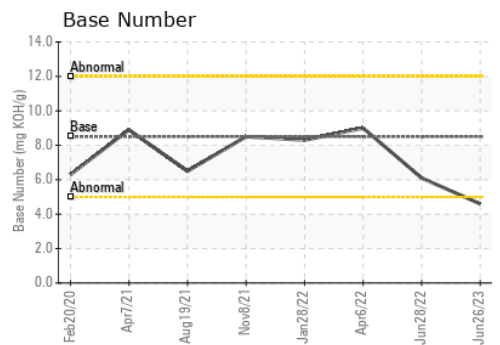
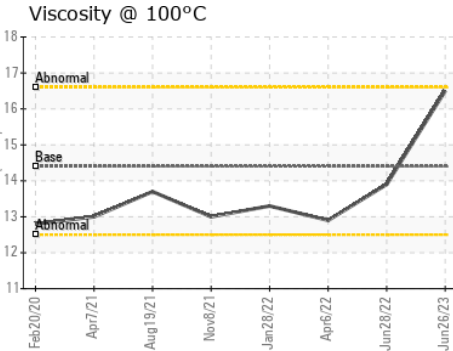
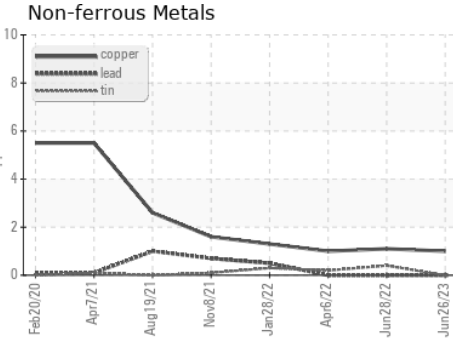
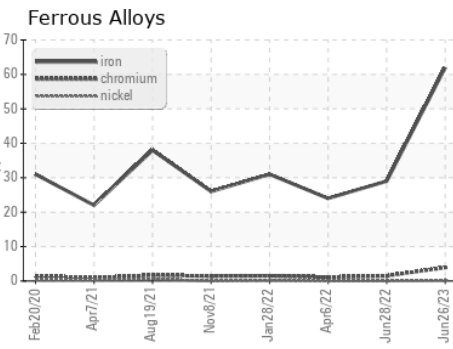
OIL ANALYSIS REPORT



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	16.5	13.9	12.9

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL0028935 **Received** : 24 Aug 2023
Lab Number : **05933172** **Diagnosed** : 25 Aug 2023
Unique Number : 10618443 **Diagnostician** : Don Baldrige
Test Package : FLEET

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 linleym@rushtruckcenters.com
 T: (708)496-7500
 F: (708)496-8818

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)