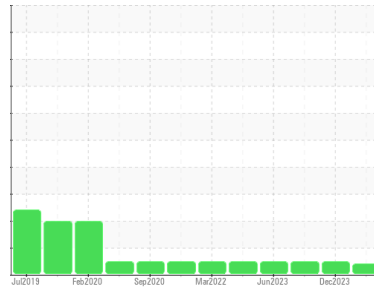




OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id
INTERNATIONAL 441324
 Component
Diesel Engine
 Fluid
MOBIL 15W40 (21 QTS)

DIAGNOSIS

▲ Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.

▲ Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		IL0030585	IL0030550	IL0030460
Sample Date	Client Info		11 Jan 2024	04 Dec 2023	14 Aug 2023
Machine Age	mls	Client Info	174027	162596	130412
Oil Age	mls	Client Info	0	104956	92805
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
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	>130	18	25	22
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	9	7
Lead	ppm	ASTM D5185m	>20	0	0	<1
Copper	ppm	ASTM D5185m	>125	<1	1	3
Tin	ppm	ASTM D5185m	>4	<1	0	<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		16	2	20
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		62	65	57
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		745	969	606
Calcium	ppm	ASTM D5185m		1641	1069	2306
Phosphorus	ppm	ASTM D5185m		1106	1010	1212
Zinc	ppm	ASTM D5185m		1342	1270	1473
Sulfur	ppm	ASTM D5185m		3213	3320	4269

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	6	8	6
Sodium	ppm	ASTM D5185m	>118	3	2	13
Potassium	ppm	ASTM D5185m	>20	4	14	12
Fuel	%	ASTM D3524	>3.0	0.5	<1.0	<1.0

INFRA-RED

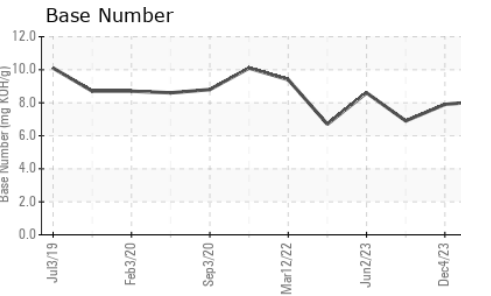
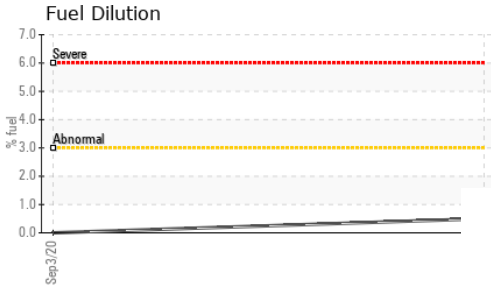
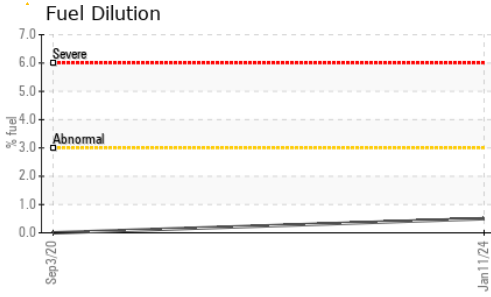
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>6	0.3	0.7	0.2
Nitration	Abs/cm	*ASTM D7624	>20	13.9	11.5	13.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.9	22.3	25.5

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.8	19.5	22.3
Base Number (BN)	mg KOH/g	ASTM D2896		8.1	7.9	6.9



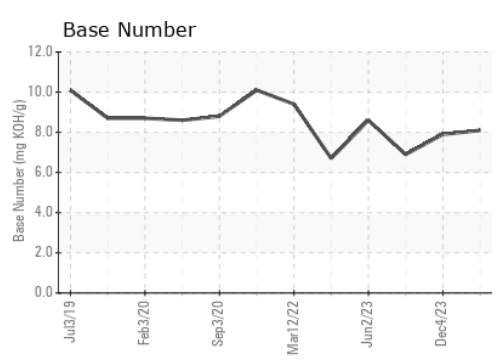
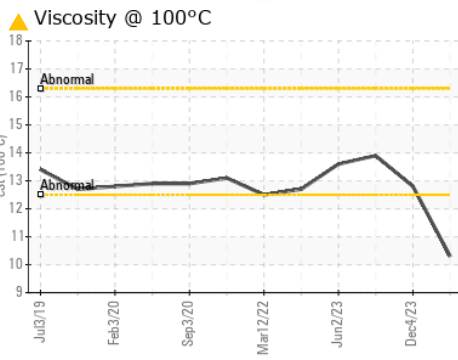
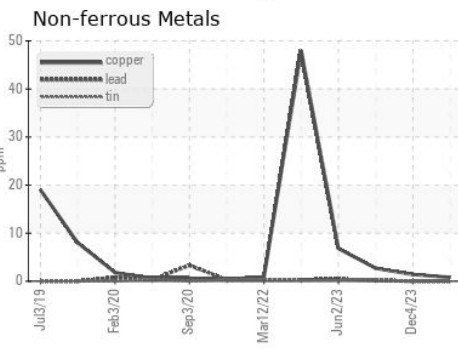
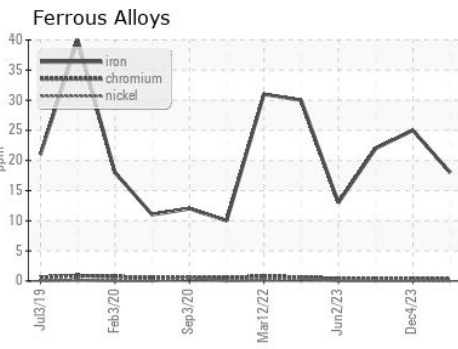
OIL ANALYSIS REPORT



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	▲ 10.3	12.8	13.9

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL0030585 **Received** : 18 Jan 2024
Lab Number : 06064825 **Diagnosed** : 24 Jan 2024
Unique Number : 10836207 **Diagnostician** : Angela Borella
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

RUSH TRUCK LEASING - CHARLOTTE IDEALEASE
 1333 AMERON DR
 CHARLOTTE, NC
 US 28206
 Contact: JERRY DIXON
 dixonj@rushenterprises.com
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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)