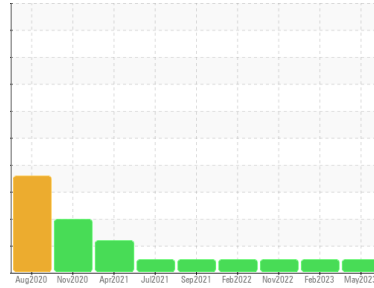




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
625060

Component
Diesel Engine

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

Metal levels are typical for a new component breaking in.

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	IL0031154	IL0028278	IL0028233	
Sample Date	Client Info	18 May 2023	02 Feb 2023	25 Nov 2022	
Machine Age	mls	Client Info	131500	113810	107337
Oil Age	mls	Client Info	18161	6473	31172
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	19	16	22
Chromium	ppm ASTM D5185m >20	<1	<1	<1
Nickel	ppm ASTM D5185m >4	<1	0	0
Titanium	ppm ASTM D5185m	0	0	0
Silver	ppm ASTM D5185m >3	0	0	<1
Aluminum	ppm ASTM D5185m >20	6	4	6
Lead	ppm ASTM D5185m >40	<1	0	<1
Copper	ppm ASTM D5185m >330	<1	1	1
Tin	ppm ASTM D5185m >15	<1	0	<1
Antimony	ppm ASTM D5185m	---	---	---
Vanadium	ppm ASTM D5185m	0	0	<1
Cadmium	ppm ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 250	6	3	13
Barium	ppm ASTM D5185m 10	0	0	0
Molybdenum	ppm ASTM D5185m 100	65	63	65
Manganese	ppm ASTM D5185m	<1	<1	<1
Magnesium	ppm ASTM D5185m 450	1005	902	913
Calcium	ppm ASTM D5185m 3000	1161	1093	1288
Phosphorus	ppm ASTM D5185m 1150	1091	1004	1045
Zinc	ppm ASTM D5185m 1350	1354	1200	1288
Sulfur	ppm ASTM D5185m 4250	3815	2999	3787

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	3	3	4
Sodium	ppm ASTM D5185m >158	2	<1	2
Potassium	ppm ASTM D5185m >20	5	4	7

INFRA-RED

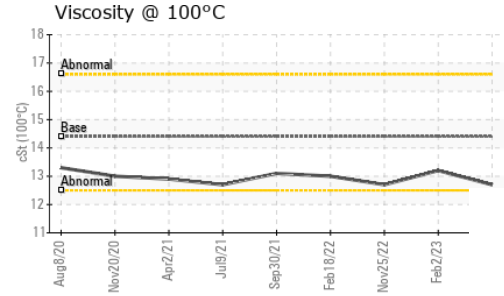
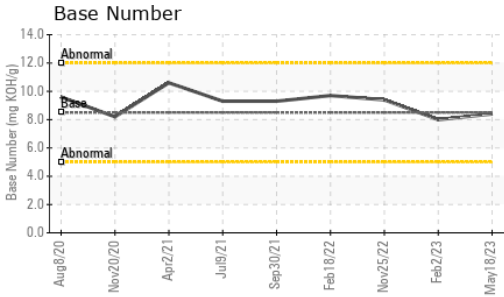
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.3	0.5	0.4
Nitration	Abs/cm *ASTM D7624 >20	9.8	9.7	10.1
Sulfation	Abs/.1mm *ASTM D7415 >30	19.7	23.5	21.9

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	16.5	20.9	18.4
Base Number (BN)	mg KOH/g ASTM D2896 8.5	8.4	8.0	9.4



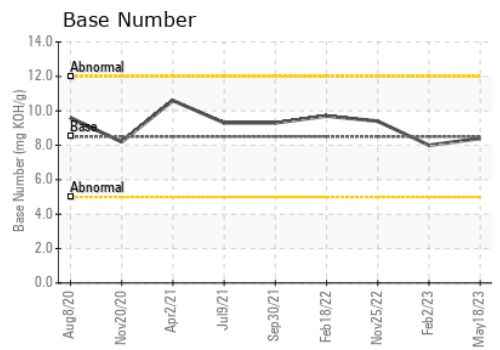
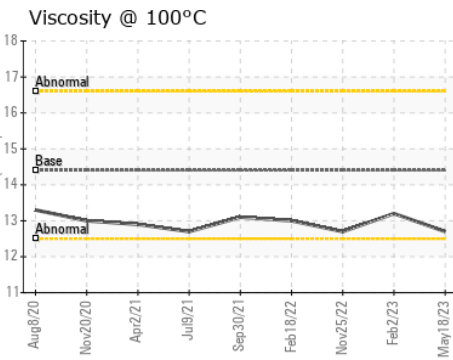
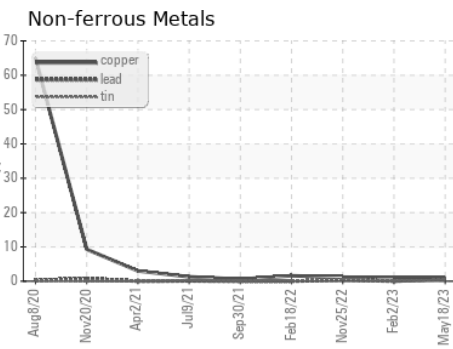
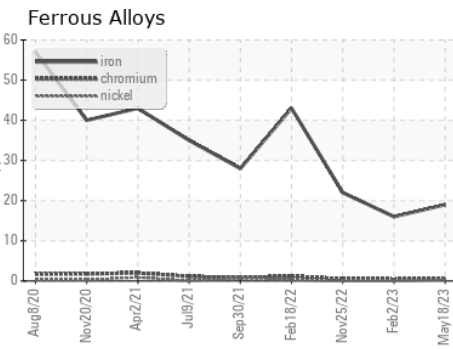
OIL ANALYSIS REPORT



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	12.7	13.2	12.7

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL0031154 **Received** : 17 Jul 2023
Lab Number : **05900587** **Diagnosed** : 18 Jul 2023
Unique Number : 10561943 **Diagnostician** : Wes Davis
Test Package : FLEET

RUSH TRUCK LEASING - CLEVELAND IDEALEASE
 5 ACORN DR
 OAKWOOD VILLAGE, OH
 US 44146-5550
 Contact: JOHN FOSTER
 FosterJ4@RushEnterprises.com
 T: (440)359-7000
 F: (440)439-5657

Certificate L2367
 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)