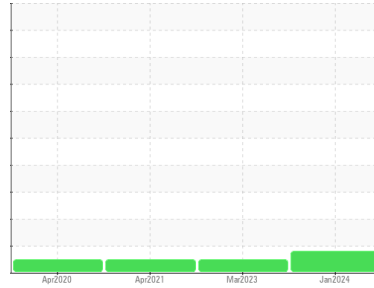




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
I6356

Component
Diesel Engine

Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time. Please specify the component make and model with your next sample.

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. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	IL0033166	IL0029470	IL0014652	
Sample Date	Client Info	26 Jan 2024	18 Mar 2023	16 Apr 2021	
Machine Age	mls	Client Info	155048	134618	0
Oil Age	mls	Client Info	20430	0	0
Oil Changed	Client Info	Changed	N/A	Changed	
Sample Status		MARGINAL	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	>100	26	24	20
Chromium	ppm	ASTM D5185m	>20	3	4	1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	3	4	3
Lead	ppm	ASTM D5185m	>40	5	2	1
Copper	ppm	ASTM D5185m	>330	<1	<1	2
Tin	ppm	ASTM D5185m	>15	2	2	<1
Antimony	ppm	ASTM D5185m		---	---	0
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	0	24	8	90
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	75	55	10
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	0	656	930	663
Calcium	ppm	ASTM D5185m		1170	1342	1263
Phosphorus	ppm	ASTM D5185m		769	1015	726
Zinc	ppm	ASTM D5185m		905	1251	830
Sulfur	ppm	ASTM D5185m		2576	3644	2431

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>25	6	6	6
Sodium	ppm	ASTM D5185m		2	<1	4
Potassium	ppm	ASTM D5185m	>20	<1	<1	5
Fuel	%	ASTM D3524	>5	▲ 4.2	<1.0	<1.0

INFRA-RED

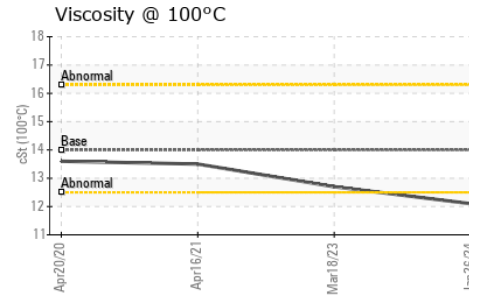
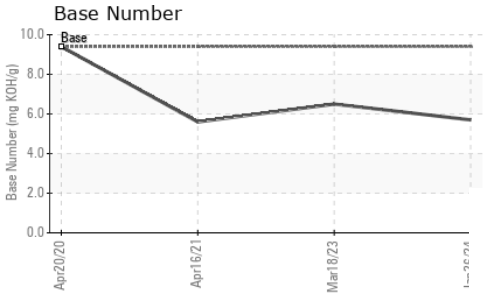
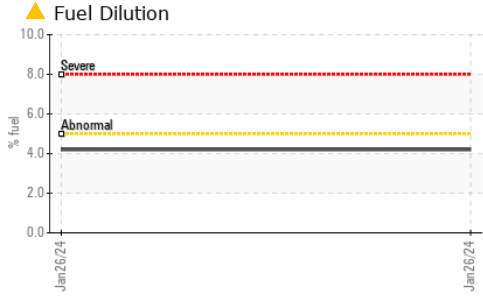
method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844	>3	1.1	0.6	0.6
Nitration	Abs/cm	*ASTM D7624	>20	12.0	10.0	10.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.0	19.9	24.6

FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.7	16.6	19.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	5.7	6.5	5.6



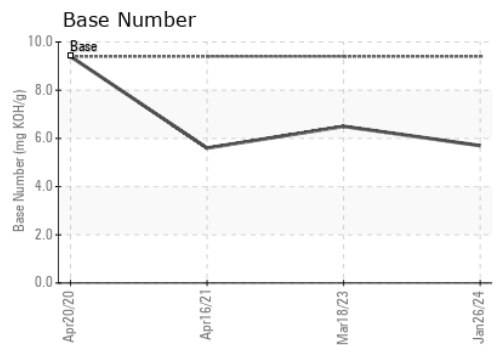
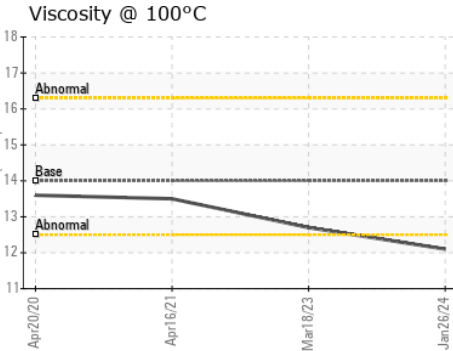
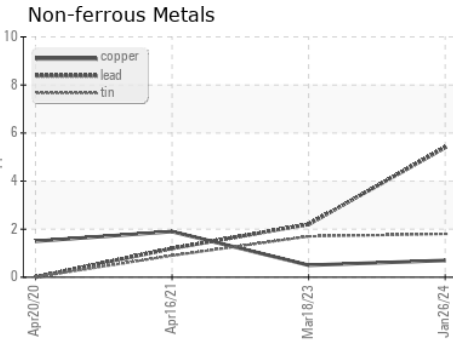
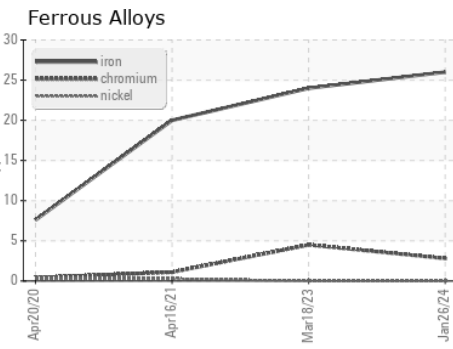
OIL ANALYSIS REPORT



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	12.1	12.7	13.5

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL0033166
Lab Number : **06077477**
Unique Number : 10859568
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

Received : 01 Feb 2024
Tested : 05 Feb 2024
Diagnosed : 05 Feb 2024 - Wes Davis

RUSH TRUCK LEASING - BOISE IDEALEASE
 770 WEST AMITY ROAD
 BOISE, ID
 US 83705

Contact: MATT BORCHARDT
 borchardtm@rushenterprises.com

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: (208)639-4859