WEAR CONTAMINATION **FLUID CONDITION** **ATTENTION MARGINAL ABNORMAL**

Machine Id

4624L							
Component Diesel Engine							
Fluid							
MOBIL 15W40 (QTS)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
The oil is near the end of it's useful service life, recommend schedule an oil change. No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number		Client Info		IL06175115	IL0028015	IL0028998
	Sample Date		Client Info		01 Apr 2024	09 Aug 2023	10 Mar 2023
	Machine Age	mls	Client Info		137331	108826	91759
	Oil Age	mls	Client Info		0	17000	0
	Filter Age	mls	Client Info		0	17000	0
	Oil Changed		Client Info		N/A	Changed	N/A
	Filter Changed		Client Info		N/A	Changed	N/A
	Sample Status				ABNORMAL	NORMAL	ABNORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	34	16	28
Aluminum ppm levels are noted. All other component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1	<1	1
	Nickel	ppm	ASTM D5185m		0	0	0
	Titanium	ppm	ASTM D5185m	- 1	0	0	0
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m		<u>12</u>	4	19
	Lead	ppm	ASTM D5185m		0	0	0
	Copper	ppm	ASTM D5185m		<1	<1	1
	Tin	ppm	ASTM D5185m		0	0	<1
	Vanadium	ppm	ASTM D5185m		0	0	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTANINATION	0:1:		AOTM DE40E	05			
CONTAMINATION	Silicon	ppm	ASTM D5185m		3	6	5
Light fuel dilution occurring. No other contaminants were detected in the oil.	Potassium Fuel	ppm	ASTM D5185m		9	10 0.2	24 ▲ 5.0
	Water	%	ASTM D3524 WC Method		▲ 4.2 NEG	0.2 NEG	NEG
	Glycol		WC Method	>0.2	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	~3	0.7	0.5	0.6
	Nitration	Abs/cm	*ASTM D7624	>20	11.7	10.4	10.7
	Sulfation	Abs/.1mm	*ASTM D7415		21.8	22.9	21.6
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
ELUID CONDITION	0 - 45		AOTM DE40E	440		4	
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>118	2	<1	1
Magnesium ppm levels are abnormally high. Calcium ppm levels are abnormally low. The BN result indicates that there is suitable alkalinity remaining in the oil.	Boron	ppm	ASTM D5185m		0	32	2
	Barium	ppm	ASTM D5185m		0	0	0 57
	Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m		63 <1	83 0	1
	Magnesium	ppm	ASTM D5185m		<1 ▲ 963	52	869
	Calcium	ppm	ASTM D5185m		▲ 1116	2330	1092
	Phosphorus	ppm	ASTM D5185m		1001	1047	858
	Zinc	ppm	ASTM D5185m		1222	1314	1127
	Sulfur	ppm	ASTM D5185m		3365	4354	2967
	Oxidation	Abs/.1mm	*ASTM D7414	>25	20.0	19.3	19.5
	Base Number (BN)		ASTM D2896		7.2	5.5	7.4
	Vian @ 10000	- C+	ACTAID 445		40.0	117	A 10.0

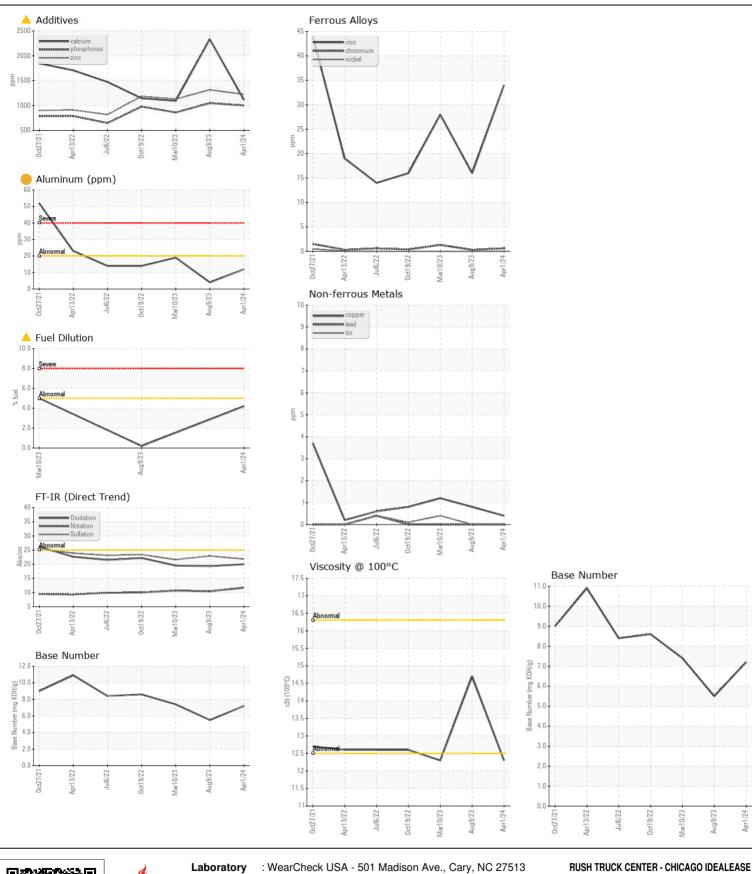
Visc @ 100°C cSt

ASTM D445

14.7

12.3

12.3







Laboratory Sample No.

: IL06175115

Lab Number : 06175115 Unique Number : 11021168

Received Tested

Diagnosed Test Package: FLEET (Additional Tests: FuelDilution, PercentFuel)

: 15 May 2024 : 15 May 2024 - Wes Davis

: 10 May 2024

4655 SOUTH CENTRAL AVENUE

Contact/Location: MIKE LINLEY - IDECHIIL

CHICAGO, IL US 60638

Contact: MIKE LINLEY linleym@rushtruckcenters.com T: (708)496-7500

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.

F: (708)496-8818 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)