

## WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

## [PMOAS3372457] Machine Id M05L08963301 Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- QTS)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number		Client Info		DC0035067	DC0026373	DC0020580
	Sample Date		Client Info		18 Apr 2024	11 Apr 2023	26 Apr 2022
	Machine Age	hrs	Client Info		0	0	287
	Oil Age	hrs	Client Info		0	0	0
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		N/A	Changed	Changed
	Filter Changed		Client Info		N/A	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	1	2	2
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		0	1	<1
	Nickel	ppm	ASTM D5185m		0	<1	2
	Titanium	ppm	ASTM D5185m		0	<1	<1
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m		<1	<1	1
	Lead	ppm	ASTM D5185m		0	1	<1
	Copper	ppm	ASTM D5185m		0	1	<1
	Tin	ppm	ASTM D5185m		0	<1	<1
	Vanadium	ppm	ASTM D5185m		0	1	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m		4	7	5
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		<1	3	2
	Fuel		WC Method		<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844		0.1	0.1	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	5.5	5.0	5.5
	Sulfation	Abs/.1mm	*ASTM D7415		15.4	15.2	15.8
	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
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	<1	2	2
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m	250	2	4	5
	Barium	ppm	ASTM D5185m	10	0	0	0
	Molybdenum	ppm	ASTM D5185m	100	2	3	2
	Manganese	ppm	ASTM D5185m		0	2	<1
	Magnesium	ppm	ASTM D5185m	450	49	36	28
	Calcium	ppm	ASTM D5185m	3000	2496	2167	2390
	Phosphorus	ppm	ASTM D5185m	1150	978	828	952
	Zinc	ppm	ASTM D5185m	1350	1136	994	1146
	Sulfur	ppm	ASTM D5185m	4250	4819	3869	3868
	Oxidation	Abs/.1mm	*ASTM D7414	>25	8.9	8.8	9.4

Base Number (BN) mg KOH/g ASTM D2896 8.5

ASTM D445 14.4

Visc @ 100°C cSt

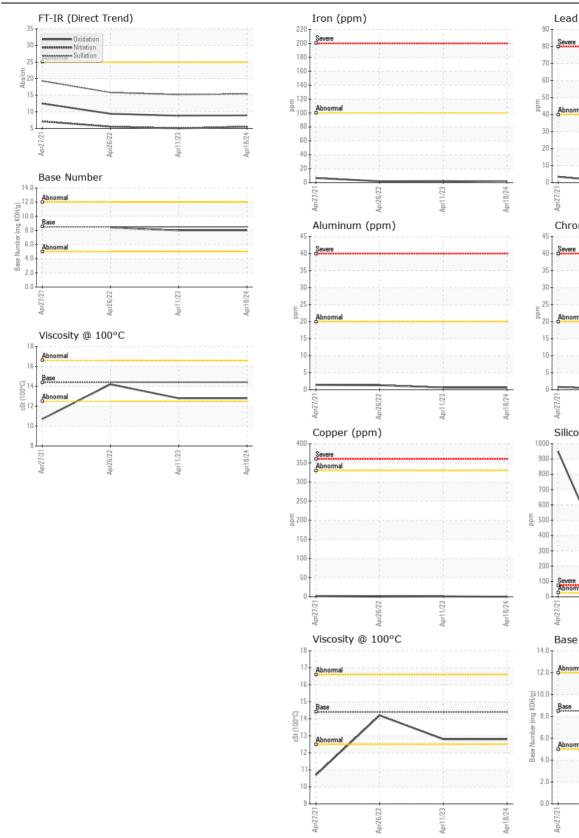
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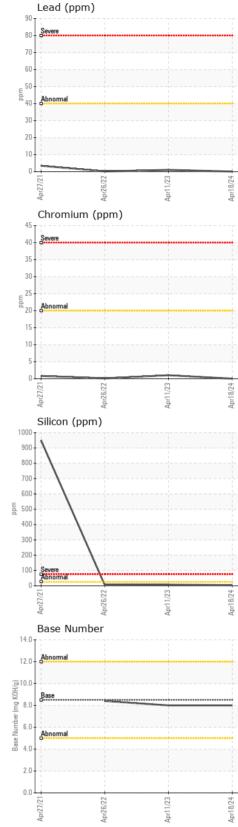
8.0 8.4

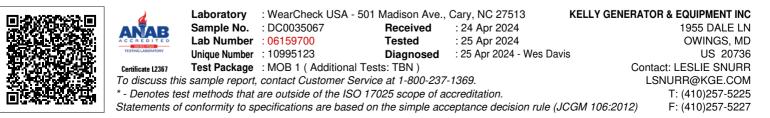
14.2

8.0

12.8







Contact/Location: LESLIE SNURR - KELOWI Page 2 of 2