WEAR CONTAMINATION **FLUID CONDITION**

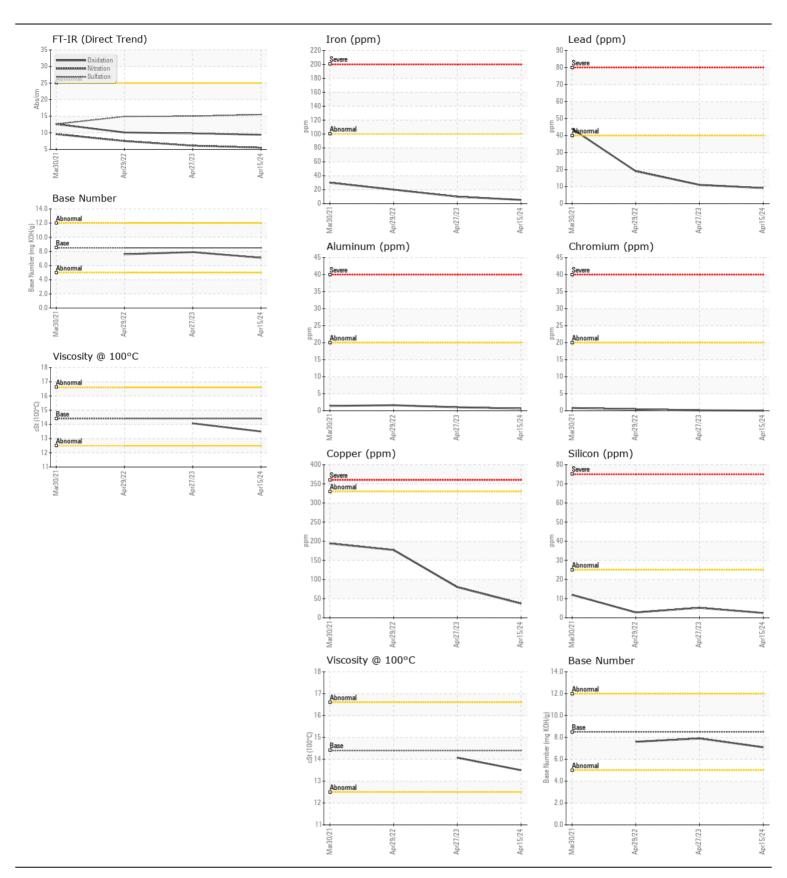
NORMAL NORMAL NORMAL

[PMOAS3372579]

3003550070

Component
Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (GAL)							
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		DC0035086	DC0026345	DC0020387
	Sample Date		Client Info		15 Apr 2024	27 Apr 2023	29 Apr 2022
	Machine Age	hrs	Client Info		111	86	61
	Oil Age	hrs	Client Info		0	23	0
	Filter Age	hrs	Client Info		0	23	0
	Oil Changed		Client Info		N/A	Changed	N/A
	Filter Changed		Client Info		N/A	Changed	N/A
	Sample Status				NORMAL	NORMAL	ABNORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	5	10	20
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m	>20	0	<1	<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	<1	1	2
	Lead	ppm	ASTM D5185m	>40	9	11	19
	Copper	ppm	ASTM D5185m		37	80	177
	Tin	ppm	ASTM D5185m	>15	0	<1	2
	Vanadium	ppm	ASTM D5185m		0	0	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	2	5	3
There is no indication of any contemination in the cil	Potassium	ppm	ASTM D5185m	>20	<1	3	4
There is no indication of any contamination in the oil.	Fuel		WC Method	>5	<1.0	0.4	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0	0	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	5.5	6.1	7.5
	Sulfation	Abs/.1mm	*ASTM D7415		15.5	15.0	14.9
	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
<u></u>	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		4	8	6
The BN result indicates that there is suitable alkalinity remaining in the	Boron	ppm	ASTM D5185m		3	9	6
oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m	100	3	6	3
	Manganese	ppm	ASTM D5185m	4=6	0	<1	<1
	Magnesium	ppm	ASTM D5185m		55	56	38
	Calcium	ppm	ASTM D5185m		2234	1845	1705
	Phosphorus	ppm	ASTM D5185m		971	818	972
	Zinc	ppm	ASTM D5185m		1150	997	1167
	Sulfur	ppm	ASTM D5185m		4847	3903	3644
	Oxidation	Abs/.1mm	*ASTM D7414		9.4	9.8	10.1
	Base Number (BN)				7.1	7.9	7.6
	Visc @ 100°C	cSt	ASTM D445	14.4	13.5	14.07	





Certificate L2367

Laboratory Sample No.

: DC0035086 Lab Number : 06159695

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received **Tested** Unique Number: 10995118

Diagnosed Test Package : MOB 1 (Additional Tests: TBN)

: 24 Apr 2024 : 25 Apr 2024 : 25 Apr 2024 - Wes Davis

KELLY GENERATOR & EQUIPMENT INC 1955 DALE LN OWINGS, MD

Contact/Location: LESLIE SNURR - KELOWI

US 20736 Contact: LESLIE SNURR LSNURR@KGE.COM T: (410)257-5225

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: (410)257-5227 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)