

OIL ANALYSIS REPORT

[6100209769] **GENSET PE4045T146148**

Component **Diesel Engine** SHELL ROTELLA T 15W40 (24 LTR)

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.





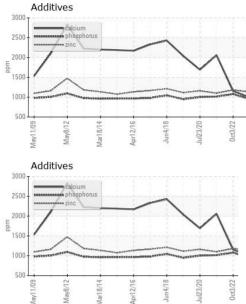
Sample Rating Trend

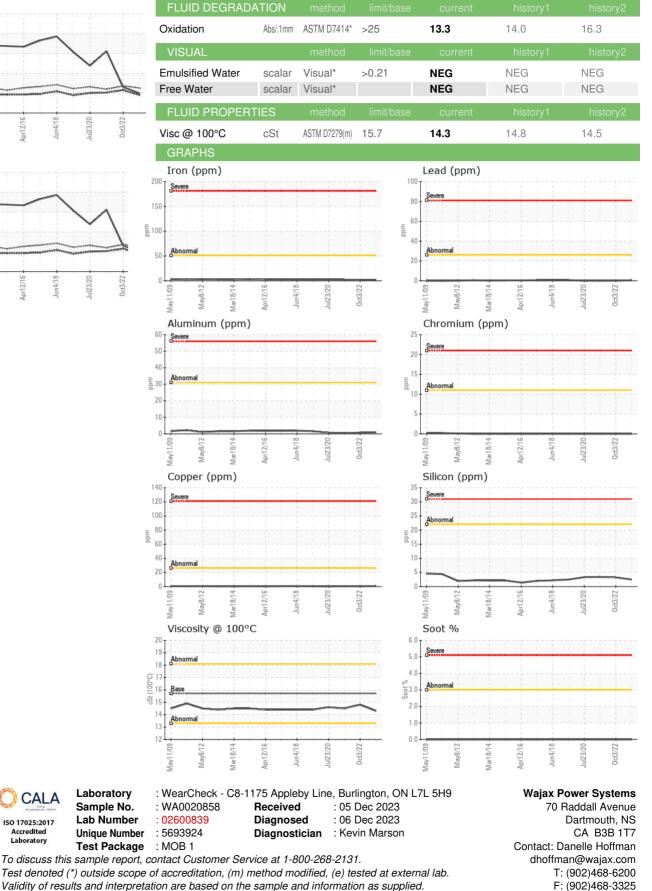
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WA0020858	WA0018447	WA0016871
Sample Date		Client Info		27 Nov 2023	03 Oct 2022	09 Aug 2021
Machine Age	hrs	Client Info		550	520	497
Oil Age	hrs	Client Info		0	30	30
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	١	method	limit/base	current	history1	history2
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	0.0
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>51	2	2	2
Chromium	ppm	ASTM D5185(m)	>11	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>31	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>26	<1	<1	0
Copper	ppm	ASTM D5185(m)	>26	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>4	0	0	<1
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	35	3	15	178
Barium	ppm	ASTM D5185(m)	0	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	0	56	52	2
Manganese	ppm	ASTM D5185(m)	0	0	<1	0
Magnesium	ppm	ASTM D5185(m)	10	930	857	46
Calcium	ppm	ASTM D5185(m)	2340	993	1156	2059
Phosphorus	ppm	ASTM D5185(m)	1110	951	1078	1014
Zinc	ppm	ASTM D5185(m)	1210	1127	1182	1100
Sulfur	ppm	ASTM D5185(m)	3890	2507	2688	2954
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>22	2	3	3
Sodium	ppm	ASTM D5185(m)	>31	2	2	2
Potassium	ppm	ASTM D5185(m)	>20	0	<1	7
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	4.7	5.0	5.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	17.8	18.5	20.3



May1

OIL ANALYSIS REPORT





Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

CALA

ISO 17025:2017 Accredited

Laboratory