## OIL ANALYSIS REPORT

## 

ONAN H190623517

## Genset

## DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		VPA057378	VPA035782	
	Sample Date		Client Info		07 Jul 2024	09 Oct 2023	
	Machine Age	hrs	Client Info		437	404	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		N/A	Not Changd	
	Filter Changed		Client Info		N/A	Not Changd	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>50	3	7	
	Chromium	ppm	ASTM D5185m		0	<1	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		۰ <1	<1	
	Titanium	ppm	ASTM D5185m	72	0	<1	
	Silver	ppm	ASTM D5185m	>5	0	0	
	Aluminum	ppm	ASTM D5185m		2	<1	
	Lead	ppm	ASTM D5185m		0	<1	
	Copper	ppm	ASTM D5185m		1	2	
	Tin	ppm	ASTM D5185m		- <1	<1	
	Vanadium	ppm	ASTM D5185m	210	0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
		Scalai	visuai	NONL			
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	3	10	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	3	3	
	Fuel		WC Method	>4.0	<1.0	<1.0	
	Water		WC Method	>0.1	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844		0.1	0.1	
	Nitration	Abs/cm	*ASTM D7624	>20	6.3	8.0	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.8	19.8	
	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	>0.1	NEG	NEG	
	0			450	•		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		3	57	
The BN result indicates that there is suitable alkalinity remaining in the	Boron	ppm	ASTM D5185m		56	57	
oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	2	
	Molybdenum	ppm	ASTM D5185m	100	46	36	
	Manganese	ppm	ASTM D5185m	450	0	<1	
	Magnesium	ppm	ASTM D5185m		762	600	
	Calcium	ppm	ASTM D5185m		1232	1291	
	Phosphorus	ppm	ASTM D5185m		772	742	
	Zinc	ppm			911	908	
	Sulfur	ppm	ASTM D5185m		3147	2614	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	16.7	17.7	

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

ASTM D445 14.4

Visc @ 100°C cSt

9.3

13.78

8.8

13.0



