**WEAR** CONTAMINATION **FLUID CONDITION** 

**NORMAL ABNORMAL ATTENTION** 

[PMO2112796966]

8470195 Component Natural Gas Engine

RECOMMENDATION  We advise that you check for the source of water entry. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please note that there was too much water present in the oil to perform an accurate viscosity test.	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		DC0028706	DC0023246	
	Sample Date		Client Info		11 Apr 2024	18 Apr 2023	
	Machine Age	hrs	Client Info		223	204	
	Oil Age	hrs	Client Info		20	24	
	Filter Age	hrs	Client Info		20	24	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				ABNORMAL	ABNORMAL	
WEAR	Iron	ppm	ASTM D5185m	>50	5	7	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		0	<1	
	Nickel	ppm	ASTM D5185m		0	0	
	Titanium	ppm	ASTM D5185m		0	0	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m		1	2	
	Lead	ppm	ASTM D5185m		4	2	
	Copper	ppm	ASTM D5185m	>35	18	25	
	Tin	ppm	ASTM D5185m	>4	1	0	
	Vanadium	ppm	ASTM D5185m		<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>±100	3	9	
CHIAMINATION	Potassium	ppm	ASTM D5185m		<1	<1	
There is a high concentration of water present in the oil.	Water	%	ASTM D6304		▲ 0.894	▲ 0.801	
	ppm Water	ppm	ASTM D6304		▲ 8940	▲ 8010	
	Soot %	%	*ASTM D7844	7.000	0	0.1	
	Nitration	Abs/cm	*ASTM D7624	>20	5.6	8.1	
	Sulfation	Abs/.1mm	*ASTM D7415		14.7	12.3	
	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	0.2%	NEG	
FLUID CONDITION	Emulsified Water			>0.1			
FLUID CONDITION	Emulsified Water Sodium	ppm	ASTM D5185m	>0.1	2	1	
The BN result indicates that there is suitable alkalinity remaining in the	Emulsified Water  Sodium  Boron	ppm	ASTM D5185m ASTM D5185m	>0.1	2 <1	1 69	
	Emulsified Water Sodium Boron Barium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	>0.1	2 <1 <1	1 69 0	
The BN result indicates that there is suitable alkalinity remaining in the	Emulsified Water  Sodium  Boron	ppm ppm ppm	ASTM D5185m ASTM D5185m	>0.1	2 <1 <1 7	1 69 0 70	
The BN result indicates that there is suitable alkalinity remaining in the	Emulsified Water  Sodium  Boron  Barium  Molybdenum	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>0.1	2 <1 <1	1 69 0	
The BN result indicates that there is suitable alkalinity remaining in the	Emulsified Water  Sodium  Boron  Barium  Molybdenum  Manganese	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>0.1	2 <1 <1 7	1 69 0 70 <1	
The BN result indicates that there is suitable alkalinity remaining in the	Emulsified Water  Sodium  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>0.1	2 <1 <1 7 0	1 69 0 70 <1 27	
The BN result indicates that there is suitable alkalinity remaining in the	Emulsified Water  Sodium  Boron  Barium  Molybdenum  Manganese  Magnesium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>0.1	2 <1 <1 7 0 24 2302	1 69 0 70 <1 27 2006	
The BN result indicates that there is suitable alkalinity remaining in the	Emulsified Water  Sodium  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>0.1	2 <1 <1 7 0 24 2302 909	1 69 0 70 <1 27 2006 1019	

Base Number (BN) mg KOH/g ASTM D2896

ASTM D445

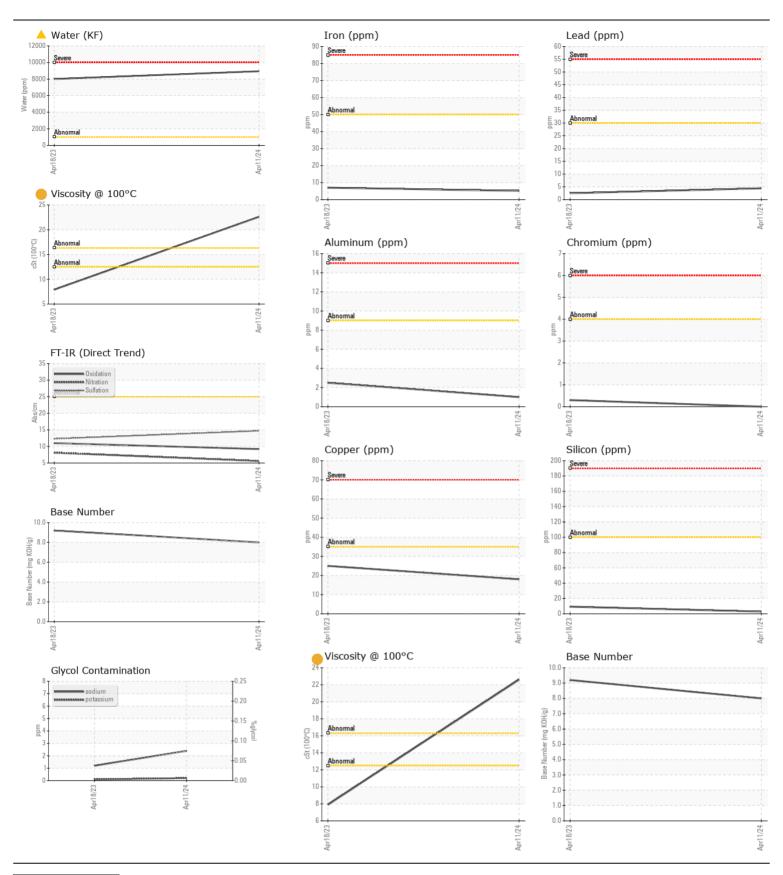
Visc @ 100°C cSt

9.2

7.9

8.0

22.6





Report Id: KELOWI [WUSCAR] 06154114 (Generated: 04/23/2024 17:25:06) Rev: 1

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : DC0028706 Lab Number : 06154114

Unique Number: 10989537

Received **Tested** Diagnosed

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

: 19 Apr 2024 : 23 Apr 2024 : 23 Apr 2024 - Jonathan Hester

**KELLY GENERATOR & EQUIPMENT INC** 1955 DALE LN OWINGS, MD US 20736 Contact: LESLIE SNURR

Test Package : MOB 1 (Additional Tests: Glycol, KF, TBN) Certificate L2367 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.

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