

# **OIL ANALYSIS REPORT**

# Kruger - 888080 **PG087**

Unknown Component

**SHELL PMO 220 (--- GAL)** 

# Sample Rating Trend NORMAL

### Recommendation

We certify that this oil is clean, that the additives are at acceptable levels, and that it is suitable for use.

				Apr2024		
				npieve+		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine ID		Client Info		4300-926-14KGA		
Department		Client Info		Sales		
Sample From		Client Info		Machine		
Production Stage		Client Info		Initial		
Sent to WC		Client Info		04/10/2024		
Sample Number		Client Info		E30001818		
Sample Date		Client Info		05 Apr 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
WEAR METALS		method	limit/base	current	history1	history2
ron	ppm	ASTM D5185(m)		15		
Chromium	ppm	ASTM D5185(m)		0		
Nickel	ppm	ASTM D5185(m)		0		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)		0		
_ead	ppm	ASTM D5185(m)		0		
Copper	ppm	ASTM D5185(m)		<1		
Γin	ppm	ASTM D5185(m)		0		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<1		
Barium	ppm	ASTM D5185(m)		1		
Molybdenum	ppm	ASTM D5185(m)		0		
Manganese	ppm	ASTM D5185(m)		0		
Magnesium	ppm	ASTM D5185(m)		<1		
Calcium	ppm	ASTM D5185(m)		<1		
Phosphorus	ppm	ASTM D5185(m)		56		
Zinc	ppm	ASTM D5185(m)		10		
Sulfur	ppm	ASTM D5185(m)		5876		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)		1		
Sodium	ppm	ASTM D5185(m)		2		
Potassium	ppm	ASTM D5185(m)	>20	1		
Water	%	ASTM D6304*		0.001		

ppm Water

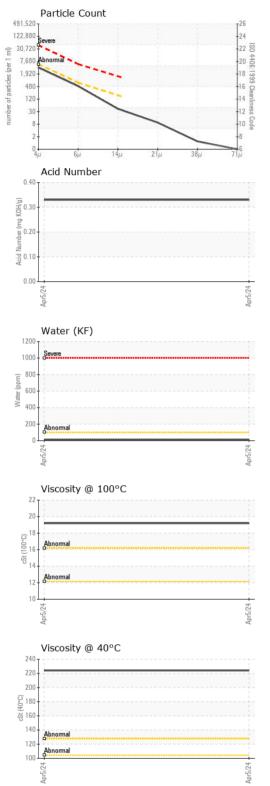
ASTM D6304\*

ppm

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## **OIL ANALYSIS REPORT**



5 4	ESS	method				history2
Particles >4µm		ASTM D7647	>5000	3435		
Particles >6µm		ASTM D7647	>640	440		
Particles >14μm		ASTM D7647	>160	36		
Particles >21µm		ASTM D7647	>40	8		
Particles >38µm		ASTM D7647	>10	1		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>19/16/14	19/16/12		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		0.33		
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Precipitate	scalar	Visual*	NONE	NONE		
Silt	scalar	Visual*	NONE	NONE		
Debris	scalar	Visual*	NONE	NONE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
Appearance	scalar	Visual*	NORML	NORML		
Odor	scalar	Visual*	NORML	NORML		
Emulsified Water	scalar	Visual*		NEG		
Free Water	scalar	Visual*		NEG		
FLUID PROPERTI	ES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)		224		
Visc @ 100°C	cSt	ASTM D7279(m)		19.2		
Viscosity Index (VI)	Scale	ASTM D2270*		96		
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image





Laboratory Sample No.

Lab Number : 02628581 Unique Number : 5761713

: E30001818

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received : 12 Apr 2024 **Tested** 

: 15 Apr 2024 Diagnosed : 15 Apr 2024 - Tatiana Sorkina Test Package : IND 2 ( Additional Tests: KF, KV100, PrtCount, TAN Man, VI )

To discuss this sample report, contact Customer Service at 1-905-372-2251. 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.

Environmental 360 Solutions Ltd.

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