

OIL ANALYSIS REPORT

Kruger - 888080 PG085-R

Unknown Component

SHELL PMO 220 (--- GAL)

Sample Rating Trend ISO

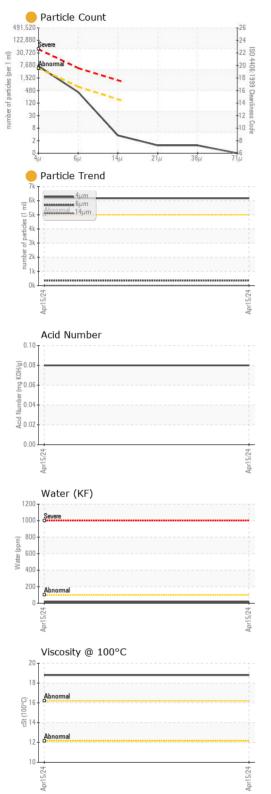
Recommendation

The sample submitted is 2 times dirtier than the ISO dirt count recommendation of 19/16/14.

Machine ID Client Info 4300-926-1 MP3					Apr2024		
Machine ID		4471011					
Department	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample From Client Info Lab Reclaim Client Info	Machine ID		Client Info		4300-926-1 MP3		
Client Info	Department		Client Info		Sales		
Sent to WC Client Info Q4/15/2024 Sample Number Client Info E30001870 Sample Date Client Info 15 Apr 2024 Machine Age hrs Client Info 0 Dil Age hrs Client Info 0 Dil Age hrs Client Info N/A Dil Changed Client Info N/A Sample Status ATTENTION WEAR METALS method limit/base current history1 history1 WEAR METALS method limit/base current history1 history1 Wickel ppm ASTM D5185(m) 0 Chromium ppm ASTM D5185(m) 0 Chromium ppm ASTM D5185(m) 0 Antimony ppm ASTM D5185(m) 0 ADDITIVES method limit/base current history1 history1 ADDITIVES method limit/base current history1 history2 ADDITIVES method limit/base current history1 history2 ADDITIVES method limit/base current history1 history2 ADDITIVES method limit/base current history1 history2 Chromium ppm ASTM D5185(m) 26	Sample From		Client Info		Machine		
Cample Number Client Info E30001870 Client Info Client Info 15 Apr 2024 Client Info D Client Info D Client Info Client Info Client Info D Client Info Cl	-		Client Info		Lab Reclaim		
Sample Date Client Info 0	Sent to WC		Client Info		04/15/2024		
Machine Age	Sample Number		Client Info		E30001870		
Dil Age	Sample Date		Client Info		15 Apr 2024		
Client Info	Machine Age	hrs	Client Info		0		
WEAR METALS method limit/base current history1 history	Oil Age	hrs	Client Info		0		
WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185(m) 5 Chromium ppm ASTM D5185(m) 0 Nickel ppm ASTM D5185(m) 0 Titanium ppm ASTM D5185(m) 0 Aluminum ppm ASTM D5185(m) 0 Aluminum ppm ASTM D5185(m) 0 Lead ppm ASTM D5185(m) 0 Copper ppm ASTM D5185(m) 0 Titn ppm ASTM D5185(m) 0 Antimony ppm ASTM D5185(m) 0 Vanadium ppm ASTM D5185(m) 0 Beryllium ppm ASTM D5185(m) 0 </td <td>Oil Changed</td> <td></td> <td>Client Info</td> <td></td> <td>N/A</td> <td></td> <td></td>	Oil Changed		Client Info		N/A		
Description	Sample Status				ATTENTION		
Chromium	WEAR METALS		method	limit/base	current	history1	history2
Description	ron	ppm	ASTM D5185(m)		5		
Nickel	-		. ,				
Description			(/		-		
Silver			. ,		-		
Ast Design Ast Design Design					-		
Lead			. ,		-		
Copper ppm ASTM D5185(m) <1 Tin 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 Cadmium ppm ASTM D5185(m) 0 Boron ppm ASTM D5185(m) 0 Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) 2 Calcium ppm ASTM D5185(m) 26 Phosphorus ppm ASTM D5185(m) 7 <td></td> <td></td> <td>. ,</td> <td></td> <td>-</td> <td></td> <td></td>			. ,		-		
Tin ppm ASTM D5185(m) 0 Antimony ppm ASTM D5185(m) 0			. ,		-		
Antimony							
Vanadium ppm ASTM D5185(m) 0 Beryllium ppm ASTM D5185(m) 0 Cadmium ppm ASTM D5185(m) 0 ADDITIVES method limit/base current history1 history1 Boron ppm ASTM D5185(m) 0 Barium ppm ASTM D5185(m) 1 Molybdenum ppm ASTM D5185(m) 0 Manganese ppm ASTM D5185(m) 2 Magnesium ppm ASTM D5185(m) 5 Phosphorus ppm ASTM D5185(m) 26 Phosphorus ppm ASTM D5185(m) 7 Sulfur ppm ASTM D5185(m) 7 Lithium ppm ASTM D5185(m) 3			. ,				
Description	•		. ,		-		
Cadmium ppm ASTM D5185(m) 0 ADDITIVES method limit/base current history1 history Boron ppm ASTM D5185(m) 0 Barium ppm ASTM D5185(m) 1 Molybdenum ppm ASTM D5185(m) 0 Manganese ppm ASTM D5185(m) 2 Magnesium ppm ASTM D5185(m) 5 Calcium ppm ASTM D5185(m) 26 Phosphorus ppm ASTM D5185(m) 7 Zinc ppm ASTM D5185(m) 7 Sulfur ppm ASTM D5185(m) <1			. ,		-		
ADDITIVES	-				-		
Boron	ADDITIVES	•••	method	limit/base	current	history1	history2
Barium		nnm					
Molybdenum ppm ASTM D5185(m) 0 Manganese ppm ASTM D5185(m) 2 Magnesium ppm ASTM D5185(m) 2 Calcium ppm ASTM D5185(m) 5 Phosphorus ppm ASTM D5185(m) 7 Zinc ppm ASTM D5185(m) 7 Sulfur ppm ASTM D5185(m) 5632 Lithium ppm ASTM D5185(m) <1			, ,				
Manganese ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) 2 Calcium ppm ASTM D5185(m) 5 Phosphorus ppm ASTM D5185(m) 7 Zinc ppm ASTM D5185(m) 7 Sulfur ppm ASTM D5185(m) 5632 Lithium ppm ASTM D5185(m) <1							
Magnesium ppm ASTM D5185(m) 2 Calcium ppm ASTM D5185(m) 5 Phosphorus ppm ASTM D5185(m) 26 Zinc ppm ASTM D5185(m) 7 Sulfur ppm ASTM D5185(m) 5632 Lithium ppm ASTM D5185(m) <1	-		. ,				
Calcium ppm ASTM D5185(m) 5 Phosphorus ppm ASTM D5185(m) 26 Zinc ppm ASTM D5185(m) 7 Sulfur ppm ASTM D5185(m) 5632 Lithium ppm ASTM D5185(m) <1	-		, ,				
Phosphorus ppm ASTM D5185(m) 26 Zinc ppm ASTM D5185(m) 7 Sulfur ppm ASTM D5185(m) 5632 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185(m) 0 Sodium ppm ASTM D5185(m) 3 Potassium ppm ASTM D5185(m) >20 <1 Water % ASTM D6304* 0.001	-		. ,				
Zinc ppm ASTM D5185(m) 7 Sulfur ppm ASTM D5185(m) 5632 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185(m) 0 Sodium ppm ASTM D5185(m) 3 Potassium ppm ASTM D5185(m) >20 <1 Water % ASTM D6304* 0.001					-		
Sulfur ppm ASTM D5185(m) 5632 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185(m) 0 Sodium ppm ASTM D5185(m) 3 Potassium ppm ASTM D5185(m) >20 <1							
Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185(m) 0 Sodium ppm ASTM D5185(m) 3 Potassium ppm ASTM D5185(m) >20 <1							
CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185(m) 0 Sodium ppm ASTM D5185(m) 3 Potassium ppm ASTM D5185(m) >20 <1							
Silicon ppm ASTM D5185(m) 0 Sodium ppm ASTM D5185(m) 3 Potassium ppm ASTM D5185(m) >20 <1 Water % ASTM D6304* 0.001							
Sodium ppm ASTM D5185(m) 3 Potassium ppm ASTM D5185(m) >20 <1 Water % ASTM D6304* 0.001		5		limit/base		history1	history2
Potassium ppm ASTM D5185(m) >20 <1 Water % ASTM D6304* 0.001			. ,				
Water % ASTM D6304* 0.001		ppm			3		
				>20			
ppm Water ppm ASTM D6304* 15		%					
	ppm Water	ppm	ASTM D6304*		15		



OIL ANALYSIS REPORT



FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	6163		
Particles >6µm		ASTM D7647	>640	358		
Particles >14μm		ASTM D7647	>160	3		
Particles >21µm		ASTM D7647	>40	1		
Particles >38µm		ASTM D7647	>10	1		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>19/16/14	20/16/9		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		0.08		
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 PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)		218		
Visc @ 100°C	cSt	ASTM D7279(m)		18.8		
Viscosity Index (VI)	Scale	ASTM D2270*		96		
SAMPLE IMAGES	3	method	limit/base	current	history1	history2
Color					no image	no image
Pottom					no image	no image
Bottom					no image	no image



CALA ISO 17025:2017 Accredited Laboratory

Laboratory

Sample No. Lab Number : 02629596 Unique Number : 5762728

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : E30001870 Received : 17 Apr 2024

Tested : 18 Apr 2024 Diagnosed : 22 Apr 2024 - Tatiana Sorkina

Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, 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.

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