

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

QC230213IND2

Component Hydraulic System Fluid AW HYDRAULIC OIL ISO 68 (--- GAL)

DIAGNOSIS

Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

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v2023 Nov2023 Nov2023 Dec2023 Dec2023 Dec2023 Dec2023

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0894111	WC0894110	WC0894109
Sample Date		Client Info		05 Jan 2024	04 Jan 2024	03 Jan 2024
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	0	0	0
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>20	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>20	0	0	0
Copper		ASTM D5185(m)	>20	0	0	0
Tin	ppm	()				0
	ppm	ASTM D5185(m)	>20	0	0	
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)	5	0	0	0
Barium	ppm	ASTM D5185(m)	5	0	0	0
Molybdenum	ppm	ASTM D5185(m)	5	0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	25	<1	0	<1
Calcium	ppm	ASTM D5185(m)	200	44	42	42
Phosphorus	ppm	ASTM D5185(m)	300	340	334	340
Zinc	ppm	ASTM D5185(m)	370	419	402	415
Sulfur	ppm	ASTM D5185(m)	2500	729	700	736
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	0	0	0
Sodium	ppm	ASTM D5185(m)		0	0	0
Potassium	ppm	ASTM D5185(m)	>20	<1	0	0
Water	%	ASTM D6304*	>0.05	0.003	0.004	0.003
ppm Water	ppm	ASTM D6304*	>500	26	45	30
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	81	102	34
Particles >6µm		ASTM D7647	>1300	24	35	8
Particles >14µm		ASTM D7647	>160	3	5	2
Particles >21µm		ASTM D7647		1	2	0
			- 10			0
			>10		0	0
Particles >38µm		ASTM D7647	>10	0	0	0
			>10 >3 >19/17/14		0 0 14/12/10	0 0 12/10/9



Abn

Nov14/23

Nov7/23

Nov21/23

Nov28/23

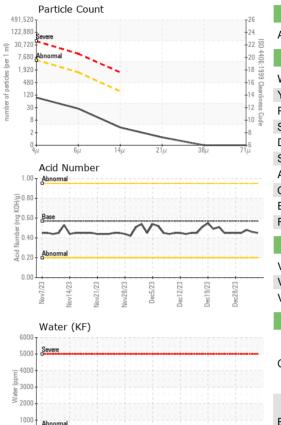
Dec5/23

Dec12/23

Dec19/23

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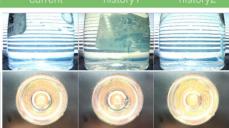
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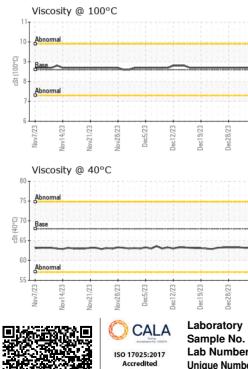


FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	0.45	0.46	0.48
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	68	63.2	63.2	63.3
Visc @ 100°C	cSt	ASTM D7279(m)	8.6	8.7	8.7	8.7
Viscosity Index (VI)	Scale	ASTM D2270*	96	110	110	110
SAMPLE IMAGES	6	method	limit/base	current	history1	history2

Color

Bottom





577 O	CALA	Laboratory	: WearCheck - C8-1	175 Appleby Line	e, Burlington, ON L7L 5H	9 WearCheck Quality Control Sample Results
	Acreditation No. 1006219	Sample No.	: WC0894111	Recieved	: 05 Jan 2024	
	ISO 17025:2017	Lab Number	: 02606790	Diagnosed	: 08 Jan 2024	Burlington, ON
	Accredited	Unique Number	: 5707876	Diagnostician	: Wes Davis	CA
7.247.0	Laboratory	Test Package	: IND 2 (Additional	Tests: KF, KV100), VI)	Contact: Dorian Anderson
* 36 - 1	To discuss this	s sample report, c	dorian.anderson@wearcheck.com			
	Test denoted ((*) outside scope (of accreditation, (m) I	(e) tested at external lab	D. T: (289)291-4652	
	Validity of resu	ılts and interpreta	F: (905)569-8605			