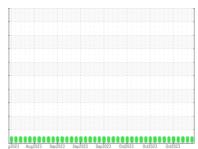


OIL ANALYSIS REPORT

Sample Rating Trend







QC230213IND2

Component

Hydraulic System

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.

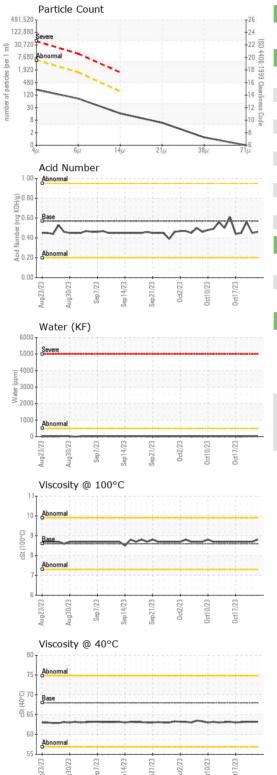
Fluid Condition

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

	g2023 Aug6023 Sup2023 Sup2023 Sup2023 Oct2023 Oct2023 Oct2023									
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2				
Sample Number		Client Info		WC0865590	WC0865587	WC0865586				
Sample Date		Client Info		23 Oct 2023	20 Oct 2023	19 Oct 2023				
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	<1				
Titanium	ppm	ASTM D5185(m)		0	0	0				
Silver	ppm	ASTM D5185(m)		<1	<1	<1				
Aluminum	ppm	ASTM D5185(m)	>20	0	0	0				
Lead	ppm	ASTM D5185(m)	>20	0	0	0				
Copper	ppm	ASTM D5185(m)	>20	<1	<1	<1				
Tin	ppm	ASTM D5185(m)	>20	0	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	<1	<1	<1				
Barium	ppm	ASTM D5185(m)	5	<1	0	<1				
Molybdenum	ppm	ASTM D5185(m)	5	0	0	0				
Manganese	ppm	ASTM D5185(m)		0	0	0				
Magnesium	ppm	ASTM D5185(m)	25	<1	<1	<1				
Calcium	ppm	ASTM D5185(m)	200	43	42	42				
Phosphorus	ppm	ASTM D5185(m)	300	341	335	337				
Zinc	ppm	ASTM D5185(m)	370	431	418	419				
Sulfur	ppm	ASTM D5185(m)	2500	695	685	686				
Lithium	ppm	ASTM D5185(m)		<1	<1	<1				
CONTAMINANTS	;	method	limit/base	current	history1	history2				
Silicon	ppm	ASTM D5185(m)	>15	<1	0	0				
Sodium	ppm	ASTM D5185(m)		0	0	0				
Potassium	ppm	ASTM D5185(m)	>20	0	0	0				
Water	%	ASTM D6304*	>0.05	0.003	0.003	0.002				
ppm Water	ppm	ASTM D6304*	>500	25.1	26.7	21.9				
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2				
Particles >4µm		ASTM D7647	>5000	192	128	102				
Particles >6µm		ASTM D7647	>1300	72	34	40				
Particles >14µm		ASTM D7647	>160	14	6	8				
Particles >21µm		ASTM D7647	>40	5	1	2				
Particles >38µm		ASTM D7647	>10	1	0	0				
Particles >71μm		ASTM D7647	>3	0	0	0				
Oil Cleanliness		ISO 4406 (c)	>19/17/14	15/13/11	14/12/10	14/12/10				



OIL ANALYSIS REPORT



FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	0.46	0.45	0.56
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	63.2
Visc @ 100°C	cSt	ASTM D7279(m)	8.6	8.8	8.7	8.7
Viscosity Index (VI)	Scale	ASTM D2270*	96	113	110	110
SAMPLE IMAGES		method	limit/base	current	history1	history2
					发展	医
Color					1865587	enow
D-#						
Bottom						



CALA ISO 17025:2017 Accredited

Laboratory

Laboratory Sample No. Lab Number **Unique Number**

: WC0865590

: 5668072

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 WearCheck Quality Control Sample Results Received : 02590993

Diagnosed Diagnostician : Wes Davis

: 23 Oct 2023 : 24 Oct 2023

Burlington, ON CA

Contact: Dorian Anderson

Test Package : IND 2 (Additional Tests: KF, KV100, VI) To discuss this sample report, contact Customer Service at 1-800-268-2131.

dorian.anderson@wearcheck.com T: (289)291-4652

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.

F: (905)569-8605 Submitted By: ?