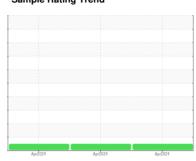


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

QC240415IND2

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.

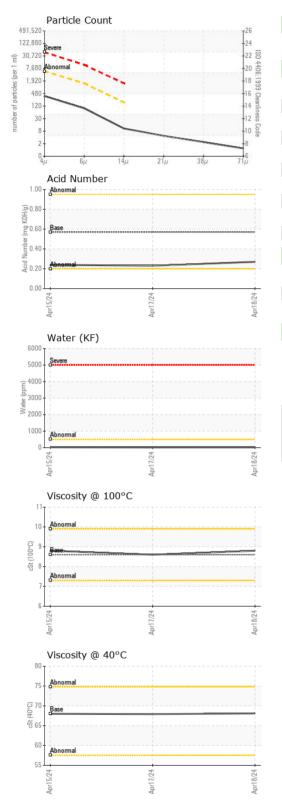
Fluid Condition

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

Apr2024 Apr2024 Apr2024							
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		WC0932938	WC0932937	WC0932935	
Sample Date		Client Info		18 Apr 2024	17 Apr 2024	15 Apr 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	0	0	0	
Lead	ppm	ASTM D5185(m)	>20	0	0	0	
Copper	ppm	ASTM D5185(m)	>20	0	0	0	
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	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	0	
Calcium	ppm	ASTM D5185(m)	200	46	47	47	
Phosphorus	ppm	ASTM D5185(m)	300	227	234	233	
Zinc	ppm	ASTM D5185(m)	370	292	300	296	
Sulfur	ppm	ASTM D5185(m)	2500	5130	5245	5305	
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	0	0	0	
Water	%	ASTM D6304*	>0.05	0.001	0.001	0.002	
ppm Water	ppm	ASTM D6304*	>500	15	14	23	
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2	
Particles >4μm		ASTM D7647	>5000	322	405	1263	
Particles >6µm		ASTM D7647	>1300	83	126	368	
Particles >14µm		ASTM D7647	>160	9	12	22	
Particles >21µm		ASTM D7647	>40	4	3	6	
Particles >38µm		ASTM D7647	>10	2	1	1	
Particles >71µm		ASTM D7647	>3	1	0	1	
Oil Cleanliness		ISO 4406 (c)	>19/17/14	16/14/10	16/14/11	17/16/12	



OIL ANALYSIS REPORT



FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	0.27	0.23	0.24
VISUAL		method				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	IFS	method	limit/base	current	history1	history2
					•	•
Visc @ 40°C	cSt	ASTM D7279(m)	68	68.1	67.9	68.0
Visc @ 100°C	cSt	ASTM D7279(m)	8.6	8.8	8.6	8.8
Viscosity Index (VI)	Scale	ASTM D2270*	96	101	97	101
SAMPLE IMAGES		method	limit/base	current	history1	history2
				13283		
Color						
_						
Bottom						



CALA ISO 17025:2017

Accredited Laboratory

Laboratory Sample No.

Unique Number : 5763059

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

: WC0932938 Received : 18 Apr 2024 Lab Number : 02629927 **Tested** : 19 Apr 2024

Diagnosed : 19 Apr 2024 - Kevin Marson Test Package : IND 2 (Additional Tests: KF, KV100, TAN Man, VI)

Contact: Dorian Anderson dorian.anderson@wearcheck.com

T: (289)291-4652 F: (905)569-8605

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.

To discuss this sample report, contact Customer Service at 1-800-268-2131.

Submitted By: ?

Burlington, ON

CA