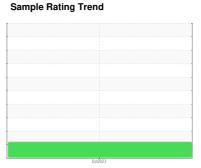


OIL ANALYSIS REPORT

- Sami



VISCOSITY



Machine Id **23-M-04-2515**

Component

Hydraulic System

AW HYDRAULIC OIL ISO 68 (--- GAL)

DIAGNOSIS

Recommendation

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil.

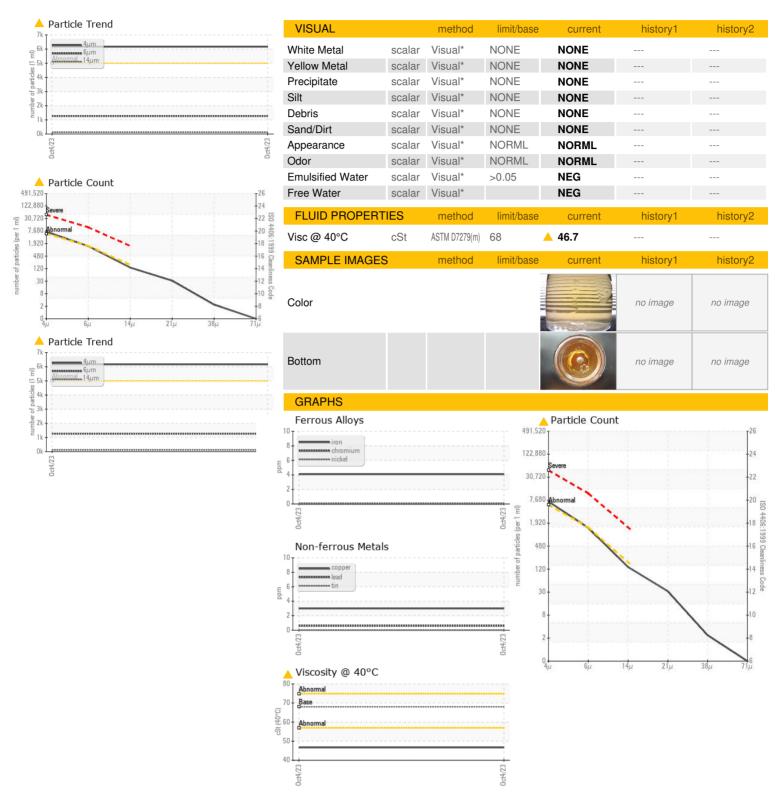
Fluid Condition

Viscosity of sample indicates oil is within ISO 46 range, advise investigate. The condition of the oil is acceptable for the time in service.

Sample Date Machine Age Oil Age Oil Changed Sample Status WEAR METALS Iron Chromium Ppm Chromium Ppm Rickel Titanium Silver Aluminum Lead Copper Tin Antimony Vanadium Ppm Beryllium Cadmium Ppm ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Ppm Rickel Rickel Ppm Rickel Rickel Ppm Rickel Rickel Rickel Ppm Rickel	method Client Info ASTM D5185(m)	limit/base	Current WC0812538 04 Oct 2023 94 94 Not Changd ABNORMAL Current 4 0 0 0 <1 0	history1 history1	history2 history2
Sample Number Sample Date Machine Age hrs Oil Age hrs Oil Changed Sample Status WEAR METALS Iron ppm A Chromium ppm A Nickel ppm A Titanium ppm A Silver ppm A Aluminum ppm A Copper ppm A Antimony ppm A Antimony ppm A Beryllium ppm A Beryllium ppm A Cadmium ppm A Barium ppm A Molybdenum ppm A Manganese ppm A Manganese ppm A Calcium ppm A Phosphorus ppm A Sulfur ppm A CONTAMINANTS	Client Info Marthod ASTM D5185(m)	limit/base >20 >20 >20 >20 >20 >20	WC0812538 04 Oct 2023 94 94 Not Changd ABNORMAL current 4 0 0 0		history2
Sample Date Machine Age Oil Age Oil Age Oil Changed Sample Status WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Antimony Vanadium Beryllium Cadmium Ppm ADDITIVES Boron Barium Molybdenum Manganese Magnesium Phosphorus Pin Sulfur Silver Aluminum Antimony Ppm Antimony Appm Antimony Antimony Appm Antimony Appm Antimony	Client Info ASTM D5185(m)	>20 >20 >20 >20 >20 >20 >20 >20	04 Oct 2023 94 94 Not Changd ABNORMAL current 4 0 0 0		history2
Sample Date Machine Age hrs (Machine Age	Client Info ASTM D5185(m)	>20 >20 >20 >20 >20 >20 >20 >20	04 Oct 2023 94 94 Not Changd ABNORMAL current 4 0 0 0	history1	history2
Machine Age hrs Oil Age hrs Oil Age hrs Oil Changed Sample Status WEAR METALS Iron ppm // Chromium ppm // Nickel ppm // Titanium ppm // Silver ppm // Aluminum ppm // Lead ppm // Copper ppm // Tin ppm // Antimony ppm // Vanadium ppm // Beryllium ppm // Cadmium ppm // ADDITIVES Boron ppm // Barium ppm // Manganese ppm // Manganese ppm // Calcium ppm // Phosphorus ppm // Sulfur ppm // Sulfur ppm // CONTAMINANTS	Client Info Client Info Client Info Client Info Client Info Client Info MSTM D5185(m) ASTM D5185(m)	>20 >20 >20 >20 >20 >20 >20 >20	94 94 Not Changd ABNORMAL current 4 0 0 0 <1	history1	history2
Dil Age	Client Info Client Info Client Info method ASTM D5185(m)	>20 >20 >20 >20 >20 >20 >20 >20	94 Not Changd ABNORMAL current 4 0 0 0 <1	history1	history2
Dil Changed Sample Status WEAR METALS ron ppm // Chromium ppm // Nickel ppm // Fitanium ppm // Aluminum ppm // Lead ppm // Copper ppm // Antimony ppm // Vanadium ppm // Beryllium ppm // Cadmium ppm // ADDITIVES Boron ppm // Barium ppm // Manganese ppm // Manganese ppm // Calcium ppm // Phosphorus ppm // Sulfur ppm // Sulfur ppm // CONTAMINANTS	method ASTM D5185(m)	>20 >20 >20 >20 >20 >20 >20 >20	Not Changd ABNORMAL current 4 0 0 0 0	history1	history2
WEAR METALS Iron ppm A Chromium ppm A Nickel ppm A Silver ppm A Aluminum ppm A Copper ppm A Copper ppm A Antimony ppm A Cadmium ppm A Beryllium ppm A Beryllium ppm A Cadmium ppm A Calcium ppm A Cal	method ASTM D5185(m)	>20 >20 >20 >20 >20 >20 >20 >20	ABNORMAL current 4 0 0 0 <1	history1	history2
WEAR METALS Iron ppm A Chromium ppm A Nickel ppm A Silver ppm A Aluminum ppm A Lead ppm A Copper ppm A Antimony ppm A Beryllium ppm A Beryllium ppm A Barium ppm A Cadmium ppm A Calcium ppm A Calciu	ASTM D5185(m)	>20 >20 >20 >20 >20 >20 >20 >20	4 0 0 0 0 <1	history1	history2
Iron ppm // Chromium ppm // Nickel ppm // Nickel ppm // Nickel ppm // Nickel ppm // Silver ppm // Aluminum ppm // Lead ppm // Copper ppm // Tin ppm // Antimony ppm // Vanadium ppm // Beryllium ppm // Cadmium ppm // Barium ppm // Molybdenum ppm // Manganese ppm // Manganese ppm // Calcium ppm // Phosphorus ppm // Sulfur ppm // Sulfur ppm // CONTAMINANTS	ASTM D5185(m)	>20 >20 >20 >20 >20 >20 >20 >20	4 0 0 0 0 <1		
Chromium Chromi	ASTM D5185(m)	>20 >20 >20 >20 >20 >20	0 0 0 <1		
Nickel ppm / Fitanium	ASTM D5185(m)	>20 >20 >20 >20 >20	0 0 <1		
Fitanium ppm / A Silver ppm / A Silv	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >20 >20 >20	0 <1		
Silver ppm A Aluminum ppm A Lead ppm A Copper ppm A Antimony ppm A Antimony ppm A Antimony ppm A Beryllium ppm A Cadmium ppm A ADDITIVES Boron ppm A Barium ppm A Molybdenum ppm A Manganese ppm A Magnesium ppm A Calcium ppm A Chosphorus ppm A Calcium ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >20	<1		
Aluminum ppm // Lead ppm // Copper ppm // Fin ppm // Antimony ppm // Vanadium ppm // Beryllium ppm // Cadmium ppm // ADDITIVES Boron ppm // Barium ppm // Molybdenum ppm // Manganese ppm // Magnesium ppm // Calcium ppm // Phosphorus ppm // Calcium	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >20			
Lead ppm A Copper ppm A Tin ppm A Antimony ppm A Beryllium ppm A Cadmium ppm A ADDITIVES Boron ppm A Barium ppm A Molybdenum ppm A Manganese ppm A Magnesium ppm A Calcium	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >20	U		
Copper Copper	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20	4		
Fin ppm Antimony ppm Antimony ppm Antimony ppm Antimony ppm Antimony ppm Anadium ppm Anadium ppm Antimore ppm	ASTM D5185(m) ASTM D5185(m)		<1		
Antimony ppm // Vanadium ppm // Beryllium ppm // Cadmium ppm // ADDITIVES Boron ppm // Barium ppm // Molybdenum ppm // Manganese ppm // Magnesium ppm // Calcium ppm // Phosphorus ppm // Calcium ppm //	ASTM D5185(m)	<.NI	3		
Vanadium ppm A Beryllium ppm A Cadmium ppm A ADDITIVES Boron ppm A Barium ppm A Molybdenum ppm A Manganese ppm A Magnesium ppm A Calcium ppm A Phosphorus ppm A Sulfur ppm A Caltium ppm A Calcium ppm	\ /	<i>></i> ∠0	0		
Beryllium ppm // Cadmium ppm // ADDITIVES Boron ppm // Barium ppm // Molybdenum ppm // Manganese ppm // Magnesium ppm // Calcium ppm // Phosphorus ppm // Zinc ppm // Sulfur ppm // Lithium ppm // CONTAMINANTS	OTLI DELOS		0		
Cadmium ppm A ADDITIVES Boron ppm A Barium ppm A Molybdenum ppm A Manganese ppm A Magnesium ppm A Calcium ppm A Phosphorus ppm A Sulfur ppm A Cinc ppm A Cinc ppm A Cinc ppm A Contaminants	ASTM D5185(m)		0		
ADDITIVES Boron ppm A Barium ppm A Molybdenum ppm A Manganese ppm A Calcium ppm A Phosphorus ppm A Sulfur ppm A Caltium ppm A Calcium ppm A Contaminants	ASTM D5185(m)		0		
Boron ppm A Barium ppm A Molybdenum ppm A Manganese ppm A Magnesium ppm A Calcium ppm A Phosphorus ppm A Zinc ppm A Sulfur ppm A Lithium ppm A	ASTM D5185(m)		0		
Barium ppm // Molybdenum ppm // Manganese ppm // Magnesium ppm // Calcium ppm // Phosphorus ppm // Sulfur ppm // Lithium ppm // CONTAMINANTS	method	limit/base	current	history1	history2
Molybdenum ppm // Manganese ppm // Magnesium ppm // Calcium ppm // Phosphorus ppm // Zinc ppm // Sulfur ppm // Lithium ppm // CONTAMINANTS	ASTM D5185(m)	5	<1		
Manganese ppm // Magnesium ppm // Calcium ppm // Phosphorus ppm // Zinc ppm // Sulfur ppm // Lithium ppm //	ASTM D5185(m)	5	<1		
Magnesium ppm // Calcium ppm // Phosphorus ppm // Zinc ppm // Gulfur ppm // Lithium ppm // CONTAMINANTS	ASTM D5185(m)	5	0		
Calcium ppm / Phosphorus ppm / Phosphoru	ASTM D5185(m)		0		
Phosphorus ppm // Zinc ppm // Sulfur ppm // Lithium ppm // CONTAMINANTS	ASTM D5185(m)	25	<1		
Zinc ppm // Sulfur ppm // Lithium ppm // CONTAMINANTS	ASTM D5185(m)	200	98		
Sulfur ppm A Lithium ppm A CONTAMINANTS	ASTM D5185(m)	300	616		
Lithium ppm // CONTAMINANTS	ASTM D5185(m)	370	828		
CONTAMINANTS	ASTM D5185(m)	2500	1507		
	ASTM D5185(m)		<1		
Silicon ppm A	method	limit/base	current	history1	history2
	ASTM D5185(m)	>15	<1		
Sodium ppm /	ASTM D5185(m)		<1		
	ASTM D5185(m)	>20	<1		
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	△ 6164		
·	ASTM D7647	>1300	1268		
		>160	120		
·	ASTM D7647		28		
·	ASTM D7647 ASTM D7647	>10	2		
a					
·	ASTM D7647		0		



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number

: 02592422 : 5669501 Test Package : MOB 2

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0812538 Received : 27 Oct 2023 : 30 Oct 2023 Diagnosed : Kevin Marson

Diagnostician

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

RWF Industries 873 Devonshire Ave. Woodstock, ON **CA N4S 8Z4**

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