



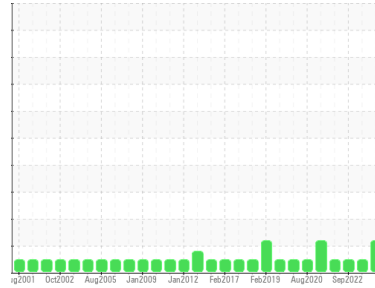
# OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Area  
**WQR [1000000152305]**  
 Machine Id  
**RAWDGENBRGDE (S/N RENK CORP EMZLK)**  
 Component  
**Drive End Bearing**  
 Fluid  
**MOBIL TERESSTIC 46 (10 LTR)**



## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. 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. The water content is negligible.

### Fluid Condition

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC0906687</b>	WC0312894	WC0548090
Sample Date	Client Info			<b>26 Mar 2024</b>	13 Sep 2023	16 Sep 2022
Machine Age	mths	Client Info		<b>360</b>	348	336
Oil Age	mths	Client Info		<b>6</b>	17	10
Oil Changed	Client Info			<b>Not Changed</b>	Changed	Not Changed
Sample Status				<b>ATTENTION</b>	NORMAL	NORMAL

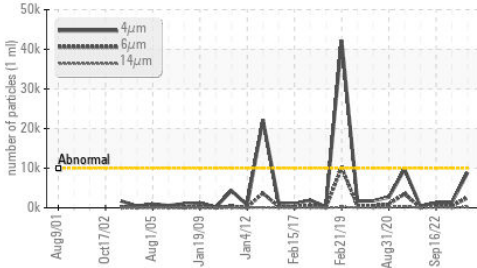
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		<b>0</b>	0	0
Iron	ppm	ASTM D5185(m)	>20	<b>0</b>	0	1
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Calcium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Phosphorus	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	0
Zinc	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	1	<1
Sulfur	ppm	ASTM D5185(m)	1750	<b>1507</b>	1907	1964
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

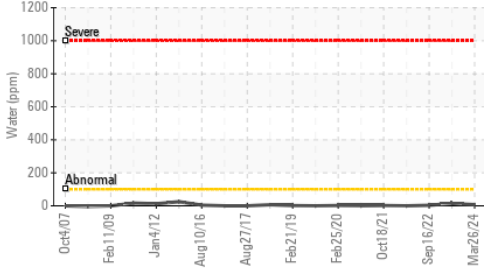
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	2	2
Sodium	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
Water	%	ASTM D6304*	>2	<b>0.001</b>	0.001	0.001
ppm Water	ppm	ASTM D6304*		<b>7</b>	14.5	3.4

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	<b>8905</b>	1357	1279
Particles >6µm		ASTM D7647	>2500	<b>2566</b>	466	524
Particles >14µm		ASTM D7647	>160	<b>191</b>	57	101
Particles >21µm		ASTM D7647	>40	<b>49</b>	19	30
Particles >38µm		ASTM D7647	>10	<b>4</b>	3	1
Particles >71µm		ASTM D7647	>3	<b>1</b>	1	0
Oil Cleanliness		ISO 4406 (c)	>20/18/14	<b>20/19/15</b>	18/16/13	17/16/14

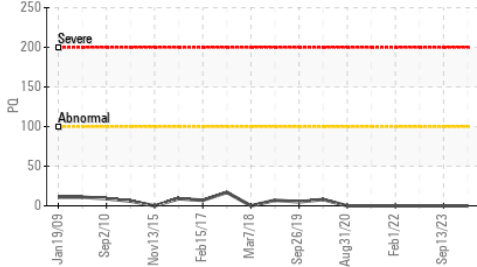
### Particle Trend



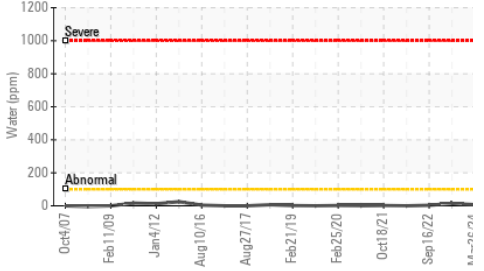
### Water (KF)



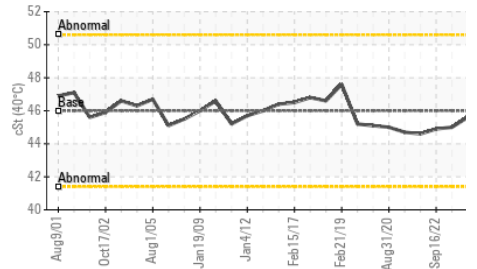
### PQ



### Water (KF)



### Viscosity @ 40°C

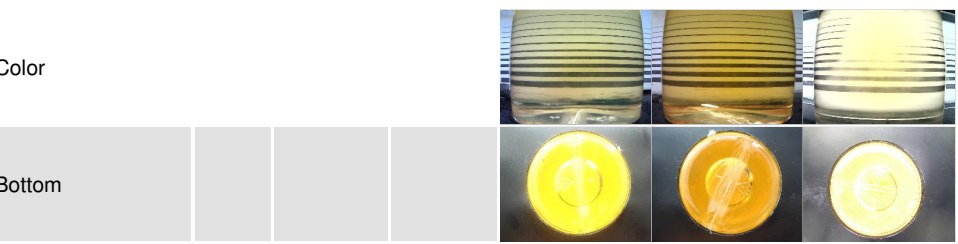


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.06	<b>0.12</b>	0.04	0.04

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>2	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

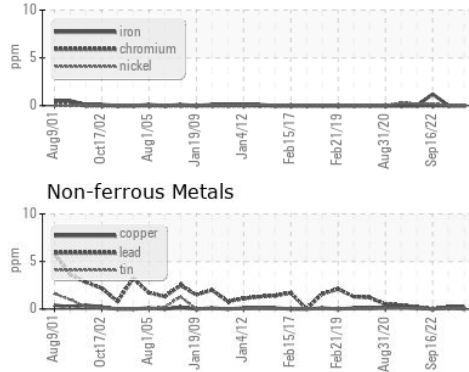
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46.0	<b>45.6</b>	45.0	44.9

### SAMPLE IMAGES

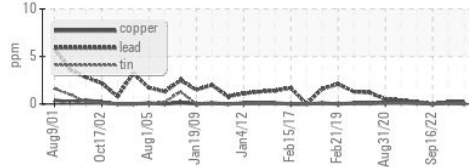


### GRAPHS

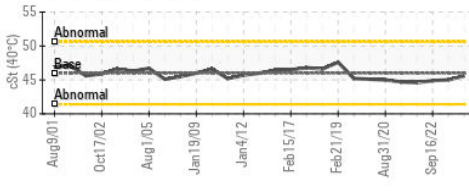
#### Ferrous Alloys



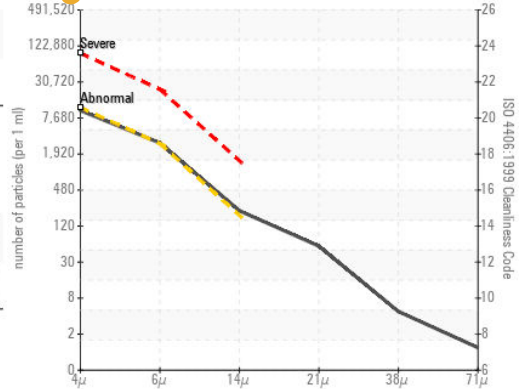
#### Non-ferrous Metals



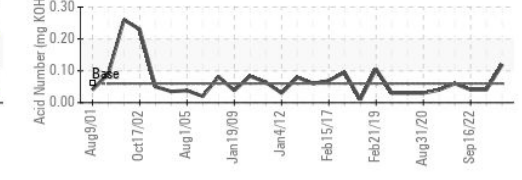
#### Viscosity @ 40°C



#### Particle Count



#### Acid Number



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0906687  
**Lab Number** : 02625726  
**Unique Number** : 5750845  
**Test Package** : IND 2 ( Additional Tests: KF, PQ, PrtCount, TAN Man )

**Received** : 01 Apr 2024  
**Tested** : 03 Apr 2024  
**Diagnosed** : 03 Apr 2024 - Wes Davis

**ALGONQUIN POWER SYSTEMS INC.**  
 354 DAVIS ROAD  
 OAKVILLE, ON  
 CA L6J 2X1

Contact: Antonino Champ Fernando  
 antoninoChamp.fernando@algonquinpower.com

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.

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 F: x: