



OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
CWPI
 Machine Id
Gate 50
 Component
Gearbox
 Fluid
{not provided} (--- 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. The ferrography results are normal indicating no abnormal wear in the system.

Contaminants

There is no indication of any contamination in the oil.

Oil 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		WC0815876	---	---
Sample Date	Client Info		05 Jun 2024	---	---
Machine Age	yrs	Client Info	0	---	---
Oil Age	yrs	Client Info	2	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			NORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		0	---	---
Iron	ppm	ASTM D5185(m) >200	<1	---	---
Chromium	ppm	ASTM D5185(m) >15	0	---	---
Nickel	ppm	ASTM D5185(m) >15	<1	---	---
Titanium	ppm	ASTM D5185(m)	0	---	---
Silver	ppm	ASTM D5185(m)	0	---	---
Aluminum	ppm	ASTM D5185(m) >25	0	---	---
Lead	ppm	ASTM D5185(m) >100	0	---	---
Copper	ppm	ASTM D5185(m) >200	1	---	---
Tin	ppm	ASTM D5185(m) >25	0	---	---
Antimony	ppm	ASTM D5185(m) >5	0	---	---
Vanadium	ppm	ASTM D5185(m)	0	---	---
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	49	---	---
Barium	ppm	ASTM D5185(m)	16	---	---
Molybdenum	ppm	ASTM D5185(m)	0	---	---
Manganese	ppm	ASTM D5185(m)	0	---	---
Magnesium	ppm	ASTM D5185(m)	<1	---	---
Calcium	ppm	ASTM D5185(m)	3	---	---
Phosphorus	ppm	ASTM D5185(m)	228	---	---
Zinc	ppm	ASTM D5185(m)	4	---	---
Sulfur	ppm	ASTM D5185(m)	5524	---	---
Lithium	ppm	ASTM D5185(m)	2	---	---

CONTAMINANTS

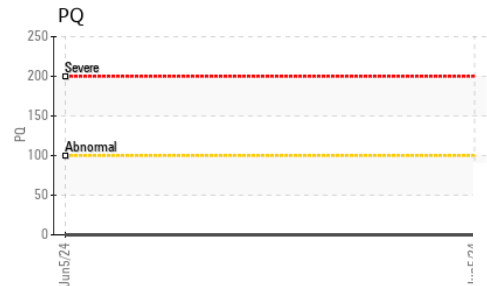
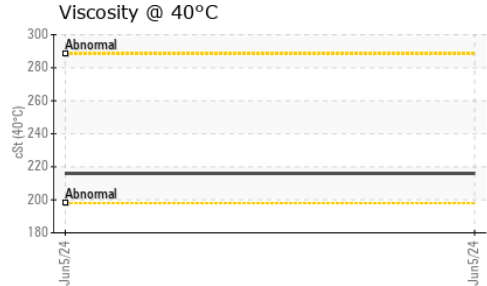
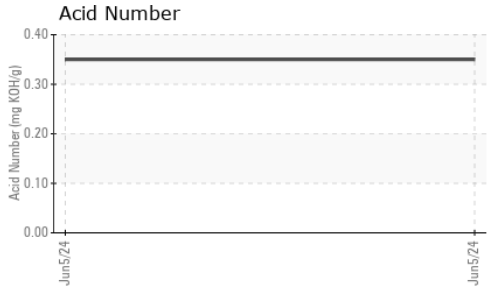
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	8	---	---
Sodium	ppm	ASTM D5185(m)	2	---	---
Potassium	ppm	ASTM D5185(m) >20	<1	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.35	---	---



OIL ANALYSIS REPORT



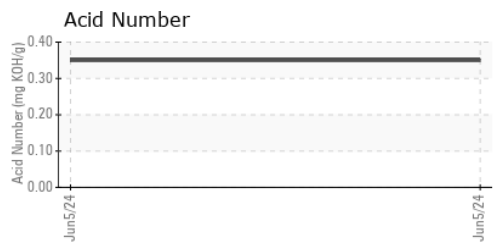
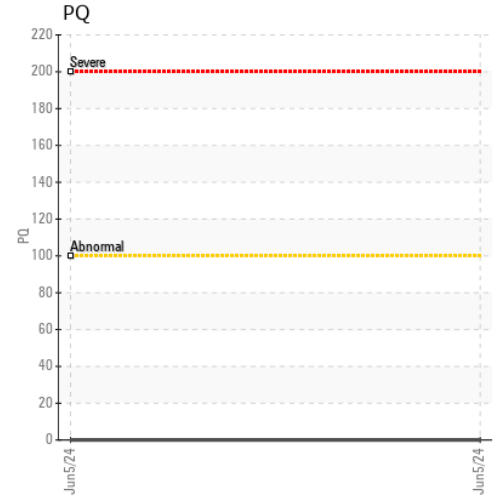
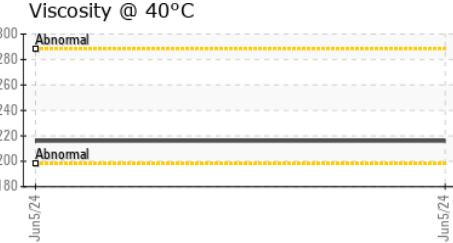
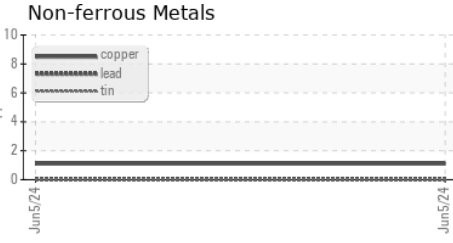
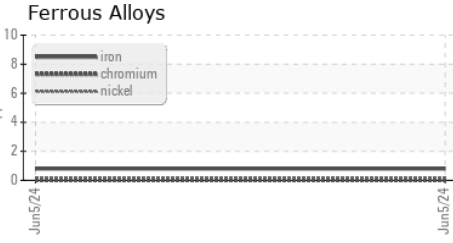
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---
Free Water	scalar	Visual*		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	216	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------

Color				no image	no image
Bottom				no image	no image

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0815876 **Received** : 21 Jun 2024
Lab Number : **02643481** **Tested** : 26 Jun 2024
Unique Number : 5801020 **Diagnosed** : 26 Jun 2024 - Kevin Marson
Test Package : IND 3 (Additional Tests: TAN Man)

Portage Power - Energy Ottawa
 4 Booth Street
 Ottawa, ON
 CA K1R 6K8
 Contact: Cheryl Gharib
 info@portagepower.com

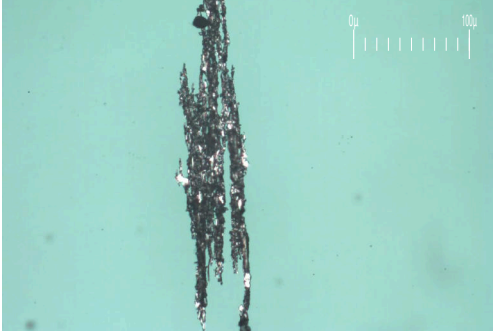
To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

T:
 F: x

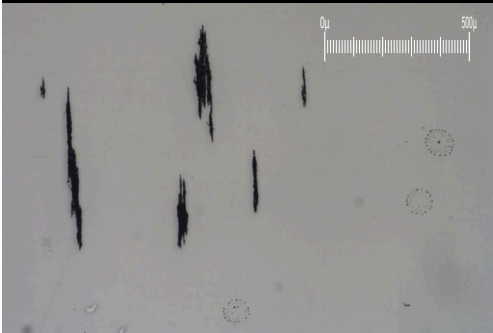
FERROGRAPHY REPORT

Area
CWPI
 Machine Id
Gate 50
 Component
Gearbox
 Fluid
{not provided} (--- GAL)

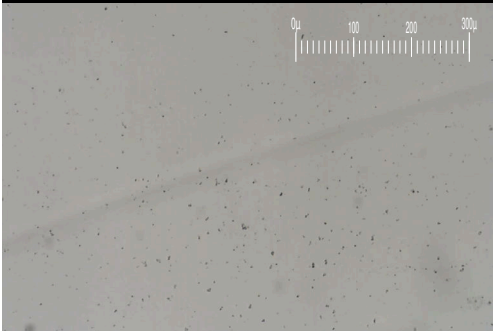
Magn: 200x Illum: BC



Magn: 50x Illum: RW



Magn: 100x Illum: RW

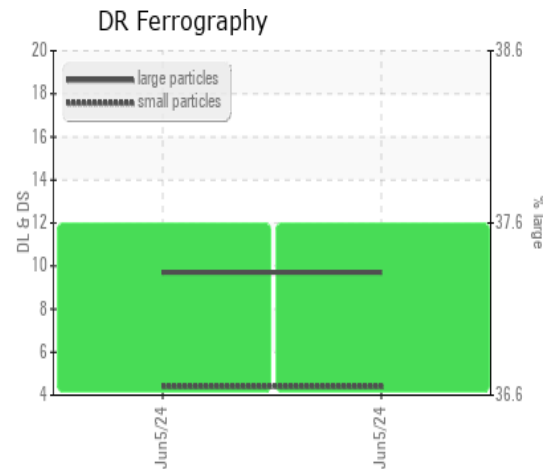


DR-FERROGRAPHY		method	limit/base	current	history1	history2
Large Particles		DR-Ferr*		9.7	---	---
Small Particles		DR-Ferr*		4.4	---	---
Total Particles		DR-Ferr*	>---	14.1	---	---
Large Particles Percentage	%	DR-Ferr*		37.6	---	---
Severity Index		DR-Ferr*		51	---	---

FERROGRAPHY		method	limit/base	current	history1	history2
Ferrous Rubbing	Scale 0-10	ASTM D7684*		3		
Ferrous Sliding	Scale 0-10	ASTM D7684*				
Ferrous Cutting	Scale 0-10	ASTM D7684*				
Ferrous Rolling	Scale 0-10	ASTM D7684*		1		
Ferrous Break-in	Scale 0-10	ASTM D7684*				
Ferrous Spheres	Scale 0-10	ASTM D7684*				
Ferrous Black Oxides	Scale 0-10	ASTM D7684*		1		
Ferrous Red Oxides	Scale 0-10	ASTM D7684*				
Ferrous Corrosive	Scale 0-10	ASTM D7684*				
Ferrous Other	Scale 0-10	ASTM D7684*				
Nonferrous Rubbing	Scale 0-10	ASTM D7684*				
Nonferrous Sliding	Scale 0-10	ASTM D7684*				
Nonferrous Cutting	Scale 0-10	ASTM D7684*				
Nonferrous Rolling	Scale 0-10	ASTM D7684*				
Nonferrous Other	Scale 0-10	ASTM D7684*				
Carbonaceous Material	Scale 0-10	ASTM D7684*				
Lubricant Degradation	Scale 0-10	ASTM D7684*				
Sand/Dirt	Scale 0-10	ASTM D7684*		1		
Fibres	Scale 0-10	ASTM D7684*				
Spheres	Scale 0-10	ASTM D7684*				
Other	Scale 0-10	ASTM D7684*		1		

WEAR

All component wear rates are normal. The ferrography results are normal indicating no abnormal wear in the system.



This page left intentionally blank