



OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

Oil room tote 27

Component

Bulk Fluid Tank

Fluid

BELRAY Turbine Oil 220 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		RP0042859	---	---
Sample Date	Client Info		05 Jun 2024	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		Not Changed	---	---
Sample Status			NORMAL	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	0	---	---
Chromium	ppm	ASTM D5185m	0	---	---
Nickel	ppm	ASTM D5185m	<1	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m	0	---	---
Aluminum	ppm	ASTM D5185m	<1	---	---
Lead	ppm	ASTM D5185m	0	---	---
Copper	ppm	ASTM D5185m	0	---	---
Tin	ppm	ASTM D5185m	0	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	---	---
Barium	ppm	ASTM D5185m	<1	---	---
Molybdenum	ppm	ASTM D5185m	0	---	---
Manganese	ppm	ASTM D5185m	<1	---	---
Magnesium	ppm	ASTM D5185m	2	---	---
Calcium	ppm	ASTM D5185m	<1	---	---
Phosphorus	ppm	ASTM D5185m	4	---	---
Zinc	ppm	ASTM D5185m	5	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	0	---	---
Sodium	ppm	ASTM D5185m	0	---	---
Potassium	ppm	ASTM D5185m	>20	---	---
Water	%	ASTM D6304	0.00	---	---
ppm Water	ppm	ASTM D6304	0	---	---

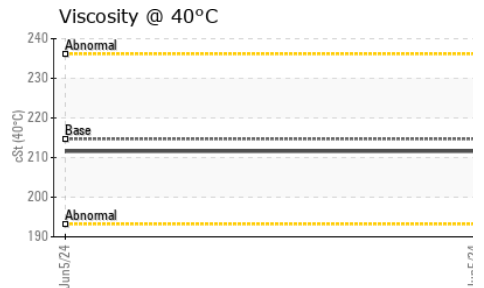
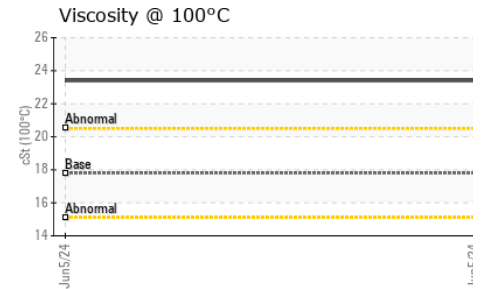
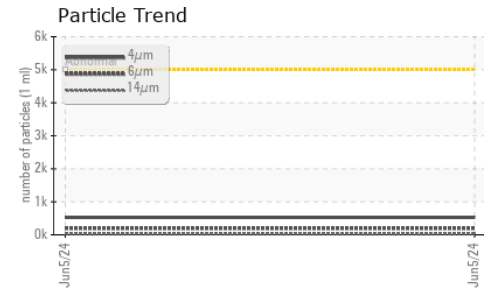
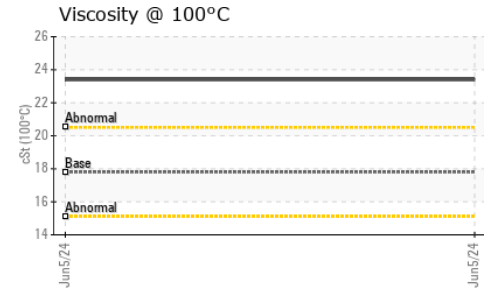
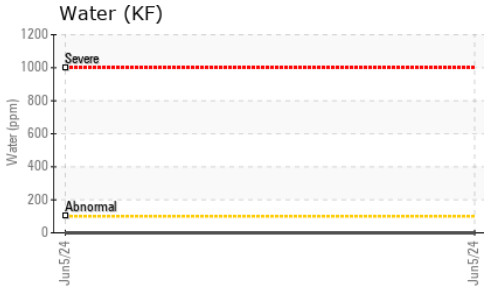
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	529	---	---
Particles >6µm	ASTM D7647	>1300	198	---	---
Particles >14µm	ASTM D7647	>160	27	---	---
Particles >21µm	ASTM D7647	>40	8	---	---
Particles >38µm	ASTM D7647	>10	0	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	16/15/12	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.088	---	---

OIL ANALYSIS REPORT

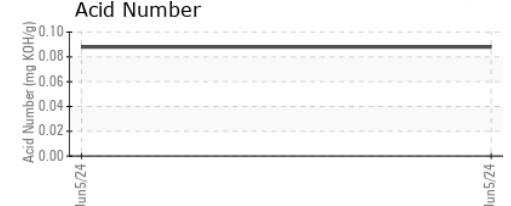
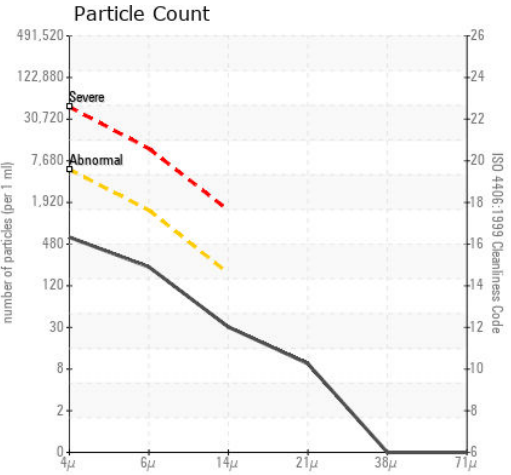
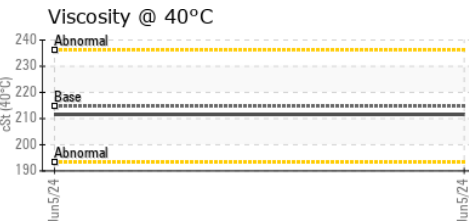
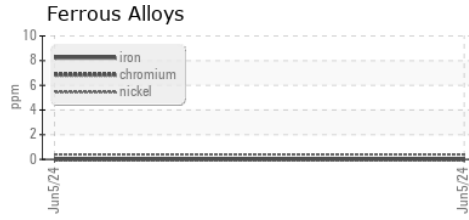


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	214.7	211.6	---
Visc @ 100°C	cSt	ASTM D445	17.8	23.4	---
Viscosity Index (VI)	Scale	ASTM D2270	94	136	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : RP0042859

Lab Number : 06203198

Unique Number : 11070659

Test Package : IND 2 (Additional Tests: KV100, PrtCount, VI)

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Received : 07 Jun 2024

Tested : 13 Jun 2024

Diagnosed : 13 Jun 2024 - Angela Borella

CALUMET

3333 MIDWAY AVENUE

SHREVEPORT, LA

US 71109

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