

OIL ANALYSIS REPORT



ELMAR FILLER #2

Component Gearbox Fluid

ROYAL PURPLE SYNERGY 140/460 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

The water content is negligible. There is no indication of any contamination in the oil.

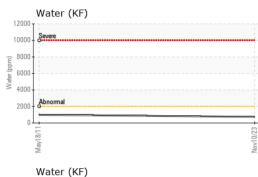
Fluid Condition

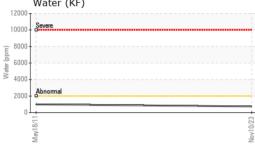
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		RP203195	RP47115	
Sample Date		Client Info		10 Nov 2023	18 May 2011	
Machine Age	yrs	Client Info		0	0	
Oil Age	yrs	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
Sample Status				NORMAL	MARGINAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	38	54	
Chromium	ppm	ASTM D5185m	>15	0	<1	
Nickel	ppm	ASTM D5185m	>15	<1	<1	
Titanium	ppm	ASTM D5185m		0	<1	
Silver	ppm	ASTM D5185m		0	<1	
Aluminum	ppm	ASTM D5185m	>25	<1	7	
Lead	ppm	ASTM D5185m	>100	0	<1	
Copper	ppm	ASTM D5185m	>200	0	<1	
Tin	ppm	ASTM D5185m	>25	<1	0	
Antimony	ppm	ASTM D5185m	>5		1346	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	<1	
Barium	ppm	ASTM D5185m		0	0	
Molybdenum	ppm	ASTM D5185m		0	0	
Manganese	ppm	ASTM D5185m		<1	<1	
Magnesium	ppm	ASTM D5185m		1	<1	
Calcium	ppm	ASTM D5185m		3	25	
Phosphorus	ppm	ASTM D5185m	200	381	257	
Zinc	ppm	ASTM D5185m		0	18	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	3	10	
Sodium	ppm	ASTM D5185m		0	3	
Potassium	ppm	ASTM D5185m	>20	0	0	
Water	%	ASTM D6304	>0.2	0.074	▲ 0.099	
ppm Water	ppm	ASTM D6304	>2000	742.9	990	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.2	0.79	0.720	

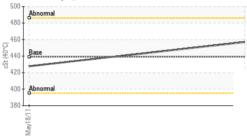


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Viscosity @ 40°C



VISUAL		method				history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	LIGHT	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.2	NEG	0 .1%	
Free Water	scalar	*Visual		NEG	NEG	
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	439	457	427.7	
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color					no image	no image
			ß			
Bottom			1	6.65	no image	no image
			No.			
Bottom					1	
GRAPHS Ferrous Alloys						
GRAPHS Ferrous Alloys			Nov10/23	Acid Number		
GRAPHS Ferrous Alloys			Nov10/23			
GRAPHS Ferrous Alloys			Nov10/23			
GRAPHS Ferrous Alloys	5					



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